THE MEDICAL ASPECT
ON
TRAUMA AND COMPENSATION
IN
OBSTETRIC AND GYNAECOLOGICAL CASES.

A THESIS

By

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INTRODUCTION.

The age-long and intimate relationship existing between Obstetrics and Gynaecology on the one hand, and the Law on the other, is apparent from history and literature.

The book of Deuteronomy[1] dating back to 1451 B.C., the code of the Emperor Numa Pompilius[2] introduced about 715 B.C. and the Hippocratic Oath[3] of 460 B.C. respectively refer to divorce on the ground of uncleanliness in a wife, the statutory delivery of the child from a woman dying during pregnancy, and the practice of criminal abortion.

That this association remains is obvious. The connecting link has been strengthened throughout the centuries and as these medical subjects have progressed and the law has expanded the relationship has become more intimate. A vast literature has arisen on the scientific connection with the Criminal Law[4], and so far as the Civil Law is concerned the relationship in cases of divorce and nullity of marriage has been exhaustively studied and written. Of comparatively recent years a new association has developed. The assessment of disablement for trauma to men has been placed on a sound basis, by valuably informative publications arising since the advent of the Workmen's Compensation Act and, more recently, through the necessary establishment of pensions boards. The same cannot be said so far as the assessment of disablement resulting/

resulting from injury to the female genitalia or to the parturient woman.

Claims for compensation for injuries are very frequently found associated with Obstetric or Gynaecological complaints,and there is a growing tendency on the part of women to incorporate such in their allegations of injuries sustained. While their complaints are often well founded, one who has the opportunity of seeing a large number of these cases soon learns that many of these gynaecological ailments following trauma are in part, or wholly, fictitious. This state of affairs is becoming progressively more common as the result of the hesitation of most medical men to give definite opinions in their reports on such cases. How much the National Insurance Act,with its attendant comfortable income and lack of responsibility for Obstetric work,is causative in this indecision is a matter for speculation, but that it has certainly encouraged it is apparent. A further contributory factor is probably found in the desire of the average practitioner to avoid a court of law,which means to him several valuable hours lost, exposure to the attack of counsel and, usually, inadequate remuneration. This attitude on the part of the medical practitioner is reflected in the insurance companies and in the law agents,whose present tendency is to adopt the attitude that if there is any question of a pregnancy being involved the case had better be settled/

settled out of court.

Assured, as I am, that annually many thousands of pounds are paid in compensation, to women, who falsely allege Obstetric and Gynaecological complications, by companies and individuals whose doctors, undecided through ignorance or apprehension, have advised them to settle rather than fight, I have devoted myself particularly to this aspect of medicine for some years. It is my good fortune to have the opportunity of seeing many cases of this type at an age when my specialist practice of Obstetrics and Gynaecology is not so extensive as to preclude my taking a deep interest in them, but when my experience of these specialties has so advanced as to let me view the matter from the standpoint of the specialist.

It is my intention to treat in this communication the relationship of Gynaecology and Obstetrics to accident and injury, and to illustrate the views I express chiefly with examples from my own cases, along with a few cases supplied me by acquaintances or culled from the literature and by references to standard works.

Introducing my subject with a general chapter on the method of approaching and recording such cases, I pass to its consideration under the three readily divisible group headings:-

1. Obstetric Conditions.

2./

2. The Newborn Child.

3. Gynaecological Conditions,

and conclude with an appendix of personal cases.

Many of the examples in this appendix are cases in which no disablement was found,and go only to show how frequently claimants would "make mountains of molehills". Such are consequently recorded in very abbreviated form. Others, however, where the circumstances are unusual or their recording valuable, are reported at length. Except where there is a very direct relationship between the alleged Obstetric or Gynaecological complaint and the bodily injuries I do not detail the latter,as these but complicate the issue, and are already very fully discussed in the literature of Compensation Medicine[5].

C O N T E N T S.

THE MEDICAL REPORT IN OBSTETRIC AND GYNAECOLOGICAL ACCIDENT CASES .... 1.

TRAUMA IN OBSTETRIC CONDITIONS.

Diagnosis of Pregnancy in Civil Cases .... 15.

Ability for Work during Pregnancy .... 26.

Trauma with the Premature Expulsion of the Uterine Contents .... 30.

Rupture of Uterus .... 40.

Missed Abortion .... 42.

The Toxaemias of Pregnancy and Injury .... 46.

THE NEW BORN CHILD.

The Investigation of Prematurity .... 63.

Intra Uterine Injuries to the Child .... 68.

TRAUMA IN GYNAECOLOGICAL CONDITIONS.

Trauma and External Genital Pathology .... 74.

Trauma and Neoplasms .... 80.

Trauma and Tubal Pathology .... 85.

Trauma and Ovarian Pathology .... 89.

Trauma in Relation to Prolapse .... 99.

TRAUMA IN MISCELLANEOUS OBSTETRIC AND GYNAECOLOGICAL CONDITIONS ....109.

APPENDIX OF CASES.

Group "A".

(1) Injuries up to the third month with no interruption of the pregnancy .... 117.

(2) Injuries in the second three months with no interruption of the pregnancy .... 125.

(3) Injuries in the last three months with no interruption of the pregnancy .... 139.

Group "B".

Injury and Missed Abortion .... 170.

Group "C".

Injuries and Haemorrhages from the non-gravid uterus .... 177.

Group "D".

Injuries and Abortion .... 214.

Group "E".

Injuries and the Premature Child .... 232.

Group "F".

Injuries with Premature Labour
or Accidental Haemorrhage .... 245.

Group "G".

Injuries and various unclassified
Obstetric and Gynaecological
conditions .... 255.

Group "H".

Injury, Neurosis and the Menopause .... 292.

BIBLIOGRAPHY AND REFERENCES .... 297.

THE MEDICAL REPORT IN OBSTETRIC AND GYNAECOLOGICAL ACCIDENT CASES.

That Gynaecological and Obstetric complaints following accident are much more common than the individual practitioner imagines is readily established by investigating the third party claims made annually against large organisations, such as tramway and railway companies or municipalities. The astonishing frequency with which claims on behalf of pregnant women are intimated, against, for example, the Glasgow Corporation Tramway Department, would also suggest that advantage is taken of the pregnant state to offer a good background for the staging of a case before an impressionable jury. This latter deduction is frequently established by the negative findings on examination.

When such cases occur, and a medical examination and report is required, the doctor instructed frequently finds himself faced by problems of etiology and prognosis, Gynaecological and Obstetric, which offer serious difficulty.

Generally speaking the cases may be classified as:-

1. Those in which a gynaecological condition is alleged to have been produced.
2. Those in which a gynaecological condition is alleged to have been aggravated.
3. Those in which it is alleged that a pregnancy may have been or will be involved.
4. Those in which a pregnancy has been involved.

5. Those in which a disorder of pregnancy is said to have been aggravated.
6. Those in which a child is born, after trauma has been sustained by the mother, and in which prematurity or sequelae of intra uterine injury are alleged.

When instructed so to examine a woman, the medical practitioner should write claimant asking her to report to his rooms for the purpose of the examination. It is well to ask such claimant to have her medical attendant or a friend with her on that occasion, as also to notify her legal advisers of the suggested arrangements. Under circumstances which preclude patient travelling the examination may have to be made in her home, where the presence of a third party is all the more desirable. It will be noted that I depart from Sir John Collie's[6] advice that it is "expedient to "courteously but firmly insist upon friends or relations "of the examinee withdrawing". I do this advisedly, for ladies of a litigious turn of mind might conceive the idea that the examining doctor, if alone with patient, would offer good game for an action of damages, or a charge of assault. For similar reasons the examiner should always have patient's permission prior to proceeding with the examination.

Glaister's procedure in criminal practice, with minor changes, is a sound one to adopt in these cases./

cases. He advises[7] the examiner "to say to the" claimant "in the presence of a third party, who acts "as a witness, that we have been asked by" A.B. "to "examine ..... her, but that we can only do so after "obtaining consent which ..... she has a right to "give or withhold, and that we will be bound to "report the results of our examination whatever they "may be. Should the consent be refused, then our "simple duty is to report that we proceeded to make "the necessary examination, but that consent was "refused. Should, however, consent be given, we may "then proceed to make the necessary examination, "being protected by the corroboratory evidence of the "witness".

When a vaginal examination is desirable I invariably extend this formula by pointing out to the patient the necessity for having rectified anything which may be found amiss, and by promising to let her know if she requires any operative treatment.

Even the admirably dogmatic Collie seems disconcerted at the prospect of examining women.[8] He indicates that a woman who has suffered an accident is "apt to be hypersensitive sometimes loses her "sense of proportion while occasionally she is almost "irresponsible", and concludes that there is, in examining any woman, "the necessity for great care, "infinite patience and impenetrable reserve".

This/

This is all the more true if anything relative to the female function is involved. Before the average woman submits herself for examination of the intimate nature necessary in these cases she has to strain every nerve, and she presents herself at the consulting rooms in an extremely highly strung condition. To be abrupt to these women during the questionnaire is to court defeat, for their highly responsive nervous systems will react to any hectoring in a manner calculated to make the subsequent examination, if permitted at all, difficult and often valueless. It is during the taking of the history of the case that the medical examiner should pave the way by an impartial manner, a patient and sympathetic deportment, and the acceptance of the most peculiar complaints without derision or apparent dubiety. I, in addition, make a point of exposing these claimants as little as possible. Obstetric or gynaecological examination should always be made under a sheet;while in these cases where the genitalia must be inspected, the left lateral position gives exposure of the parts without unduly straining the examinee's natural modesty. If one is provoked to essay "third degree" methods it is wise to wait until the practical part of the examination is complete before instituting them.

Compiled from notes taken at the time, and always preserved, the Medical Report should be composed with care. It should contain a brief description/

tion of the accident, which should only be investigated so far as it may help in understanding any injuries sustained. The suggestion that an accidental blow in the small of the back produced haemorrhoids in a patient eight months pregnant, as was alleged in one of my cases, is almost too obvious as a negative example of the point. The positive relationship is found in several other cases quoted hereafter, but one is noteworthy - the case of a perfectly fit woman who had a pavement collapse under her, with the result that she fell feet first into a cellar beneath, sustaining an undoubtedly traumatic retroversion of uterus.

Passing, one notes the complaints at the time of the injury, and what steps were taken to counteract these conditions. The question of claimant's ability for work should be investigated, as also the time during which she was confined to bed or in Hospital.

Proceeding, one should, for the recording of the "Present Complaints", put the question "What do you "feel amiss now?" The replies should be entered in sequence, and, before continuing, it is as well to add the supplementary question "Now, is that everything "you feel wrong?"

Having thus recorded all the existing complaints, and noted age and occupation, the examination should be confined to these points and the findings and/

and opinion, later stated, should deal with each complaint in the same order.

Thereafter the special questionnaire is instituted with reference to patient's general condition, as also with regard to each special feature of the case. In all gynaecological and obstetric cases this should include a full statement of the menstrual history, a record of all previous confinements, and similar full details relative to any particular complaint. Haemorrhages in gynaecological cases, for example, call for investigation of their duration, of the interval between the accident and the onset of the flow, and of the absence of other etiological factors. Again, in cases of abortion, the age of the pregnancy, the history of specific disease of albuminuria, of endometritis or other possible etiological entities demands the most complete investigation.

All examinations should include a record of the condition of the nervous system, and any lesion, old or new, in the other systems. Also I would advise routine examination of the urine and the employment of the pathological or biochemical laboratory in cases offering suitable opportunities. The Wassermann Reaction in cases of still birth and abortion, the examination of cervical and urethral swabs in infected cases, and the gross and microscopic examination of material passed from the vagina in/

in cases of bleeding are illustrative of this line of action.

The report should terminate with the conclusions logically reached after full consideration of the history and findings in the case. In this opinion the examiner should include his views as to whether the conditions found resulted from the trauma, were aggravated by such injury, or were likely to be involved by it. If there is a disablement an estimate of its duration should be made.

The whole process is best illustrated by reproducing two of my reports in full. These are examples of records in an obstetric and a gynaecological case complicated by accident.

8, Park Quadrant,
G L A S G O W, W.
8th June, 1922.

Statute Labour - Claim by Mrs. C.
(Case A. (2), VIII. Appendix).

In accordance with instructions from The Town Clerk of the City of Glasgow, I, on this date, medically examined Mrs. A. C. of 34 Lyon Street, with reference to injuries alleged to have been sustained by her on May 8th last.

The examination was performed at my Rooms.

Patient's Statement. About 10 p.m. on the evening of May 8th, while proceeding along Garscube Road near Church Place, patient tripped in the hole left/

left by a broken glass prism in a pavement light outside a shop there. In falling, she sustained injuries to her left side and left knee; both of these became painful and discoloured, the skin of the knee being at one place broken.

<u>Present Complaints</u>. The knee has more or less recovered, but she still has some pain in her left side, and a bearing down sensation in the small of her back. Patient's principal worry just now is the effect of this accident on her current pregnancy.

<u>Examination</u>. <u>Left Knee</u>. Over the knee-cap, somewhat to the outer side,are four or five small scratches, such as might be produced by falling on a gravel path. There is no bone or joint involvement.

The leg is otherwise normal except for a blue patch about the area of a florin on the outer aspect of the mid third of the thigh, and two or three scratches, lateral to the head of the thigh bone.

Patient, a housewife, 23 years of age, has had one labour, three years ago. That labour was a normal one, but she has not felt well since the birth, being subject to headaches and general lassitude. Her menstrual periods were regular, of the 3/21 type, the loss was average, and there was no attendant pain. Her last period was about the middle of October, the exact date she could not say. Foetal movements had been felt prior to the accident, but since then, she stated, they had not been so marked. She had also not noticed/

noticed any obvious growth since her fall. She had no difficulty with her bladder, but her bowels were somewhat loose, and had been so since the beginning of her pregnancy.

The uterus was enlarged, reaching two and a half inches above the navel. Foetal parts were very easily felt, and abundant foetal movements were readily appreciated. There was no undue tenderness even on deep pressure in any part of the abdomen, and the uterus itself was in no way tender on manipulation. Internal examination demonstrated that the child lay in the first vertex position, i.e. with the head downwards in the position of greatest frequency.

The pelvis was normal.

The nervous system was not involved.

The urine was normal.

Opinion and Remarks. From a consideration of the history and my findings in this case, I am of opinion that patient has sustained bruising and scratching of the left knee and thigh. On this score there is now no disablement. So far as the pregnancy is concerned, it has not been interfered with in any way by her accident, and any abnormality developing after this date will be a thing apart from that accident.

On Soul and Conscience,

8, Park Quadrant,
G L A S G O W, W.
12th May, 1922.

Claim by Mrs. R.

As instructed by the General Manager of the Glasgow Corporation Tramways, I, on 11th current, medically examined Mrs. R. of 88 Old Shettleston Road, with reference to injuries alleged to have been sustained by her on 29th ultimo.

Patient's Statement. About 7.30 on the evening of April 29th patient was boarding a car at Westmuir Street. She had one foot on the platform and the other on the step when the conductor appeared, rang the bell to start the car, at the same time saying that the car was full, and pushed patient off the car. She fell backwards, injuring her head and back. Aided home, she sent for her doctor who had since attended her. On her return to her home it was noticed that she was bleeding from the vagina. This bleeding continued for seven days.

Present Complaints. Patient complains of pain in the back of her head, across her shoulders and back, as also in her left arm, left shoulder, and small of back. She has also headaches and feels her eyes heavy, while the vaginal bleeding is a source of concern to her.

Examination. Claimant, a housewife, 36 years of age, was a very stout woman.

Between/

Between the shoulders, and running up towards the neck was an area of swollen indurated painful tissue, of the shape and about the size of a morning roll. It showed considerable blue-red discolouration. The head movement at the neck was full but caused considerable pain.

The posterior surface of the left shoulder was also discoloured and painful on pressure, and this condition held for the posterior surface of the left upper arm.

Patient had marked finger tremors and her knee jerks were exaggerated, but I could not detect any other signs suggestive of nervous involvement.

Claimant has had three children. The first was delivered normally, the second and third, both difficult births, required instrumental interference. Her youngest child was three years of age.

The bleeding mentioned above started at once after her fall and continued for seven days. There was no attendant pain.

Her menstrual periods were regular, of the 3/28 type, attended by some pain and there was a white intra-menstrual discharge. Patient was peculiar in that she menstruated during the first few months of her pregnancies. On this occasion, however, she was quite confident that she was not pregnant. Her bowels were normal and she had no trouble with the passing of water. The urine contained no abnormal constituent.

Examination/

Examination of the abdomen was negative.

Vaginal examination was not easily performed on account of her very stout abdominal wall. The external genitals and the vaginal canal were normal for a woman who had had a family. The cervix, or neck of the womb, was deeply and extensively lacerated and eroded as the result of difficult labours, and I was worried to find that firm rubbing of this part with a finger caused bleeding. The uterus itself was lying back in the position known as retroversion.

Opinion and Remarks. From a consideration of the history and my findings in this case, I am of opinion that patient is at present suffering from very severe bruising of the back, left shoulder and left arm. The remaining signs, even at this late date, are very marked. It is surprising to have found no bone injury in a woman of her weight who suffered such violence as would produce the remaining swelling and discolouration. She also shows signs of nervous involvement, which is, I consider, not a traumatic neurasthenia, but a temporary nervousness which might be called nervous debility.

The bleeding at the time of the accident cannot be dissociated from the injury. Trauma may produce such haemorrhage. So far as the accident is concerned I am sure the uterine involvement has passed.

At the same time patient has a retroverted uterus and a lacerated and eroded cervix. These are things/

things apart from the accident and of long duration. The fact that rubbing the rather friable cervical erosion caused free bleeding is noteworthy. Its presence in a private patient would lead to a piece being taken for examination to rule out the possibility of an early cancer of the cervix. Patient is in need of operative treatment and I spoke of this to her husband.

On Soul and Conscience,

In these two examples it will be noted that the history of the fall is recorded under the heading "Patient's Statement". I adopted this paragraph in my reports, in place of "History of Accident" after being cross-examined by counsel on the facts of an accident which, in my report, varied from the story given by defenders,for whom I appeared. I had no difficulty in attributing the difference to the fact that pursuer was my informant. To obviate the introduction of such unnecessary cross-examination, pushed with the intention of irritating a witness early in the course of evidence, I advise the adoption of this new heading.

It may be noted that the examination includes details not essential to the opinion,but these should invariably be included because of their usefulness in court. In the first example, for instance, I mention/

mention that "The uterus was enlarged, reaching two "and a half inches above the navel. Foetal parts "were easily palpable and abundant foetal movements "were felt", and later "the child lay in the first "vertex position". These details, commonplace at the time, may be of inestimable value later in court if it is alleged, for example, that the child was stillborn, or that the mother and child suffered a severe breech birth resulting from the accident.

In the second case I deliberately omitted from my report the actual cause of the bleeding as that was a debatable question. An omission of this type gives a free field. I had no doubt that it was from the diseased cervix, stimulated by trauma.

In the conclusion of my "opinion and "remarks" I mentioned my conversation with claimant's husband regarding her condition. It is always well to note any departure from normal routine of this nature to prevent any possible misconstruction. This case was an early cancer of cervix, and claimant, as the result of my advice, was later subjected to panhysterectomy.

TRAUMA IN OBSTETRIC CONDITIONS.

DIAGNOSIS OF PREGNANCY IN CIVIL CASES.

Diagnosis of Pregnancy in Civil Cases.

The diagnosis of pregnancy, the estimation of its age, and the investigation of whether or not the uterine contents are alive, are duties which fall to the medical examiner in every obstetric case with a compensation element in it. The claimants have all axes to grind, so the allegation of a current pregnancy, the dates given as those of the last menstrual period, and the story of absence of foetal movements should never be accepted without a confirmatory examination.

For civil medico-legal purposes, the diagnosis of pregnancy and the decision as to whether or not such pregnancy is alive should depend entirely on reliable signs. Practically all the symptoms have fallacies, and all of them may be simulated, while not a few of the signs are by no means trustworthy. In the absence of positive signs a diagnosis should only be offered when a sum of symptoms and a sum of probable signs is adduced.

The Symptoms of Pregnancy.

THE CESSATION OF THE MENSTRUAL FLOW.

Value in diagnosis. Amenorrhoea, per se, is unreliable, as it has many fallacies and, again, a factor which reduces its value considerably is the necessity for accepting the claimant's word for its presence. At the same time it is well to assume that a woman with amenorrhoea at any time between puberty and the menopause, if we except a period of lactation, is pregnant and/

and only to discard that diagnosis when further investigation has disproved it.

<u>Fallacies</u>. Amenorrhoea is physiological prior to puberty, in the course of lactation and subsequent to the menopause. Again it is occasionally found that a woman has a very irregular menstrual history with perhaps months of amenorrhoea at a time. A secondary amenorrhoea as the result of a diseased condition, lack of endocrine balance, anaemia, general debility, extreme bi-lateral ovarian disease or hope or fear pseudocyesis, to mention but a few of the possible etiological factors, is not uncommon, while, of course, castration by operation X-Rays or radium also explains the absence of the periods.

<u>Value in Estimation of Age of Pregnancy</u>. It is general practice to estimate the age of a pregnancy from the last menstrual date, but the uncertainty of this method is known to all who follow the practice of obstetrics. The factors influencing this uncertainty are the possibility of a patient becoming pregnant during a period of secondary amenorrhoea, conception during lactation is the commonest example of this, the possibility of a pregnant woman having one or two periods after conception, where menstruation apparently continues till the fusion of the decidua vera with the decidua reflexa, and the continuation of menses during the complete pregnancy as in cases of double uterus.

A/

A cancer of cervix, extreme cervical erosion or small cervical polypi may produce a flow during pregnancy simulating menstruation. These are examples of accepted obstetric factors, but the main element in the unreliability of menstrual dates as an indication of the age of a pregnancy is the very scant attention paid by women in general to their menstrual cycle. To illustrate this fact I investigated nine months' attendances at my dispensary at the Glasgow Maternity Hospital. Of four hundred and thirty eight new cases two hundred and forty three were unable to state the date of their last menstruation, and of the remaining one hundred and ninety five only eighty one were, on investigation, apparently reliable. These eighty one gave an average duration of pregnancy of two hundred and eighty three days, but as individual cases varied from a maximum duration of three hundred and nineteen[x] [9,10] days to a minimum duration of two hundred and fifty six days we find that even in examples of cases/

[x]Jardine cites a case lasting three hundred and five days; while Munro Kerr & Haig Ferguson state:- "Cases are described where fully developed children "have been born as early as the two hundred and "fortieth day and as late as the three hundred and "thirteenth to three hundred and twentieth day, "calculated from data apparently admitting no doubt".

cases considered reliable and where, unlike civil litigation cases, there was no possible motive for deception, there was an outside error of no fewer than fifty three days. Such an unintentional mistake in dates might possibly explain some of the cases of alleged prematurity which I have met and which are hereafter recorded.

While the expected date of delivery can be estimated by counting back three months from the first day of the last period and adding seven days[11], a date so arrived at should not be considered more exact than the middle of the probable fortnight. In my estimations I make a practice of utilizing one of the standard "Obstetric Tables", thus doing away with the possibility of tedious cross-examination on the reliability of estimation[x][12].

I am unable to find any relation between the menstrual type and the duration of pregnancy, and cannot accept the view that the duration of pregnancy should be estimated on a calculation of ten times the interval between periods. The adoption of such theories in medico-legal practice is to court disaster/

[x]De Lee states that pregnancy may vary in duration from two hundred and twenty to three hundred and thirty days.

disaster and to encourage pursuer's counsel to a long irritating cross-examination, not infrequently terminating in the exasperation and apparent irritation of the witness, with the complete mystification of the already befogged jurors.

Value in relation to intra uterine death. Amenorrhoea, per se, is valueless in this regard, but when an uterus is found to be much smaller than the period of amenorrhoea would suggest, intra uterine death is suggested. This relationship is fully discussed in the part dealing with missed abortion.

Of the remaining presumptive symptoms little need be said. In medico-legal practice they are of minimal value except in a confirmatory sense.

MORNING SICKNESS.

Diagnostic Value. This symptom is very variable and is only of suggestive value in diagnosis.

Fallacies. A considerable number of women have no nausea during the currency of a pregnancy, while morning sickness may result from other etiological factors.

Value in estimation of age of pregnancy. While this symptom generally commences at the beginning of the second month and terminates after six or eight weeks, its uncertainty makes it of no value in estimating the age of a gestation.

FREQUENCY OF MICTURITION.

Diagnostic Value. Per se this symptom is valueless.

Fallacies./

Fallacies. Cystitis, fibroids, neurosis, etc.

Value in estimation of age of pregnancy. Nil.

Such further symptoms as the "longings", increased salivation and pressure sensations are valueless and are better omitted from court practice.

Quickening and breast changes are included under the Signs of Pregnancy.

SIGNS OF PREGNANCY.

DISCOLOURATION OF VAGINAL MUCOSA. (CHADWICK'S SIGN).

Value in diagnosis. This sign is in greater or lesser degree present throughout all pregnancy.

Fallacies. A similar bluish pigmentation of the genital mucosa is found in gynaecological cases with extreme pelvic congestion.

HEGAR'S SIGN.

Value in diagnosis. This sign of pregnancy is produced by the extreme softening of the uterus in the early months as the result of increased vascularity, and is recognised bi-manually by the presence of a soft zone of tissue in the, as yet unoccupied, lower uterine segment, between the comparatively resistant cervix, fixed by the paracervical tissue, and the fundus uteri with its growing pregnancy. In the hands of a specialist this sign is to all intents a positive one.

Fallacies. The finest example of this sign I have ever met, one in which the softening was so extreme as almost to convey the impression that cervix and fundus were/

were separate entities was in a non-pregnant woman with a soft fibro-myoma[13].

Value in Estimating Age of Pregnancy. Hegar's sign is generally present between the sixth and twelfth week of Pregnancy.

Value in Relation to Intra Uterine Death. Nil.

INTERMITTENT CONTRACTION AND RELAXATION OF THE UTERUS.

Value in Diagnosis. In the hands of a specialist this sign is to all intents and purposes positive. It is appreciated from the fourth month.

Fallacies. Very occasionally a soft fibroid may give the typical contractions.

Value as to Foetal Death or Age of Pregnancy. Nil.

BREAST CHANGES.

Value in Diagnosis. The more cases I see, the less diagnostic trust do I place in breast changes. That the presence of mammary discomfort, enlargement, areola formation, pigmentation and secretion are useful confirmatory observations, especially in a primipara, I agree, but beyond this I consider them valueless.

Fallacies. Once a breast has secreted further secretion, in many cases, may be expressed for years[14]. This fact alone is sufficient to destroy the diagnostic value of breast changes; but when it is realised that myomata, ovarian neoplasms and pseudocyesis may be causative, their reliability becomes a matter of extreme/

extreme doubt. A hospital case of my own is of illustrative value. The patient, a woman in the early forties had been married for many years but was childless. She came to the hospital complaining of bleeding and with a history of seven months amenorrhoea. Her whole story and appearance suggested a pregnancy yet her condition was a pseudocyesis. In this case all breast changes, even secretion, were found[15].

Value in Estimation of Age of Pregnancy. Nil.

Value in Relation to Intra Uterine Death. It is said that breast changes retrogress after the death of the uterine contents, as in cases of missed abortion, but the data above make such a suggestion valueless in medico-legal practice.

INTERNAL BALLOTTEMENT.

This sign is appreciated by placing a finger in the anterior fornix and giving a sharp jerking movement upwards. The uterine contents are propelled upwards in the liquor amnii, and, as they again settle, the gentle contact is appreciated by the examining finger. This sign is available from the fourth month and is considered positive evidence of pregnancy.

Fallacies. Pedunculated Fibroids, Large Vesical Calculi, Small Ovarian Cysts, etc.

PALPATION/

PALPATION OF THE FOETAL PARTS.

Value in Diagnosis. This is a positive sign of pregnancy.

Fallacies. Subserous multiple fibroids, abdominal neoplasms etc.

Value in Relation to Age of Pregnancy. These parts may be palpated in favourable cases from the fourth month. In the late months all examinations for legal purposes should include the diagnosis of the foetal lie, presentation and position.

THE PERCEPTION OF FOETAL MOVEMENT.

Value in Diagnosis. The first appreciation of foetal movement by the mother is quickening, one of the presumptive symptoms of pregnancy while the palpation of these movements by an experienced obstetrician is one of the positive signs. At first the patient may feel these movements as "faint flutterings", but later they pass to distinct bumps, and later still to occasionally severe blows. When the attendant feels these movements, like the application of a firm rap with knuckles, through the medium of a quilt, when he can hear them as dull thumpings with his stethescope, or when he sees them, the age of the pregnancy and a thin abdominal wall making that possible, he has proof positive of the presence of a living gestation.

Fallacies. Peristalsis may lead a woman to believe that quickening has occurred. I have found this symptom developed in examples of pseudocyesis.

Value/

Value in Estimation of Age of Pregnancy. The onset of quickening is very variable and it is best to accept it only as an indication that the patient is in the vicinity of mid term. Multipera appreciate it generally at an earlier date than women pregnant for the first time. Occasionally in the former it may be present as early as, or even before, the sixteenth week of pregnancy[16].

Value in Relation to Intra Uterine Death. The history of the presence of foetal movement, confirmed by the observation of the attendant, is indisputable evidence of the foetus being alive. It has been said that, just prior to foetal death, the movements may become very marked[17], but my observations cannot confirm this view. The cessation of such movements is not even presumptive evidence of foetal death, and it is a weekly dispensary duty to reassure women by listening to a foetal heart when, from absence of any suggestion of movement, they have become convinced that their children had died in utero.

AUSCULTATION OF THE FOETAL HEART.

Value in Diagnosis. This is the most important positive sign of pregnancy and life in utero.

Fallacies. The only fallacy is the confusion of the maternal heart beat, which can be avoided by making a practice of taking the maternal pulse, while auscultating, and noting the difference in rate.

Value/

Value in Relation to Age of Pregnancy. As a rule the foetal heart becomes audible about the sixteenth week[18], though, under certain conditions, it may not be heard until much later.

UTERINE SOUFFLE.

This sign is strong presumptive evidence of pregnancy.

Fallacy. As it results from the blowing of the maternal blood through the tortuous uterine arteries any marked enlargement of those vessels, such as is found in large fibroids, may cause it.

FUNIC SOUFFLE.

This soft souffle, due as it is to the foetal blood being driven past an obstruction in the cord, is proof of foetal life. It has the same rate as the foetal heart.

ABILITY FOR WORK DURING PREGNANCY.

Ability for Work during Pregnancy.

The decision as to the fitness or otherwise of a pregnant woman for work is a matter of varying difficulty. To no problem of this subject more aptly than to this one can the phrase "circumstances alter "cases" be applied. That the women of Egypt work in many cases in the fields and, labour having begun, are confined nearby, to return to their duties that same day is well known. Even in our civilization many women work right up to the onset of labour and are well all the time. There is one case in my own experience of a typist who had become pregnant, and who not only worked in her office till the onset of labour, but attended herself in her confinement, which she conducted in the bathroom of her home, and resumed her usual duties next morning. I recall another instance of a woman tried in the Circuit Court in Glasgow in 1923, charged with concealment of pregnancy, who had performed full household work and charring up to the time of delivery, and who had resumed these duties within six hours of the birth. Several times I have met in hospital practice maid servants brought direct from their situations for full time delivery, and on one occasion a waitress from a local hotel who found it necessary suddenly to relinquish her duties.

Taylor[19]

Taylor[19] quotes several instances of fitness for work up to, and even immediately after, delivery which are of interest in relation to this question. The most illuminating is that of a girl of eighteen years who was delivered during the night. So little disturbance was caused that no member of her family was roused. She came down to breakfast, walked a mile and a half to the school where she taught, and walked back that evening. On the next day she walked twelve miles. Another of his cases describes a woman who, delivered instrumentally at midnight, was found scrubbing her doorstep at 9 a.m. on the following morning[20].

On the other hand many women, as the result of intercurrent disease or abnormal pregnancy, find it necessary to cease all strain, mental or physical, in the first few weeks of the currency of a gestation. The all too familiar hyperemesis gravidarum exemplifies this sad state of affairs.

Other less common conditions must also have an effect. I give three examples.

The first[21], a woman in the early forties, the mother of three children, all instrumentally delivered, consulted me gynaecologically regarding a protrusion from the vagina. I found that she had a very considerable cystocele, rectocele and prolapse of uterus. I inserted a large sized rubber ring pessary, and arranged for her admission for operative treatment/

treatment. Prior to her time for admission she became pregnant. By the end of the third month of this pregnancy her support came out, and she paid no attention to it. At five months she reported again, with the anterior vaginal wall and cervix protruding some eight inches through the vulva. The condition had become so severe that after reposition of the parts no pessary big enough to remain in position could be found. From that time till delivery it was necessary for her to remain in bed.

As a contrast to this case, another dispensary patient, a flower seller, and an individual of the type suitably classified as "tough", despite a very similar degree of prolapse and, in addition, enormous vulvar varices, persevered at her calling, one calculated to accentuate her complaint, right up to the onset of labour[22].

The third case is one of considerable interest[23]. This unfortunate woman, pregnant for the fourth time, had never succeeded in passing the fourth month. I saw her first when she had missed one period in her fourth pregnancy, took a Wassermann test at that time and found the reaction positive. I forthwith had suitable treatment administered and advised her as to her general care of herself and the avoidance of anything calculated to cause a recurrence of abortion. She was in fair circumstances and her whole duties were those of the house, but about this time/

time her husband was sentenced to a term of imprisonment, and she was left with no means of support. She appealed to the Parish Authorities for outdoor relief and they sent their doctor to see her. He said that she was fit for work and aid was refused. She very promptly let me know and I am glad to say the matter was adjusted.

These examples illustrate the variations met in this type of case. In these days, when light work cannot be had, the examiner must estimate ability for duty in terms of full work only and judge each case on its merits. In borderland cases I invariably give the benefit of the doubt to the patient.

In the general run of cases a normal pregnant woman may work up to the seventh month, provided her duties do not entail heavy lifting or straining. Such duties should be considered outwith the scope of the enceinte from the beginning.

TRAUMA AND THE PREMATURE EXPULSION OF THE UTERINE CONTENTS.

Trauma and the Premature Expulsion of the Uterine Contents.

Pregnancy, early or late, may be interrupted as the result of a maternal injury.

A force applied to the mother may produce this termination in a series of ways. It may kill the uterine contents direct, these later, acting as a foreign body, being expelled; secondly, it may produce a separation of the chorionic or placental elements from the uterine wall, this separation probably being attended by haemorrhage, whereby the death of the contents is secondary to the bleeding; and lastly, it may so stimulate the patient's nervous system that uterine contractions are produced and that these lead to a secondary separation of the contents from the wall with subsequent expulsion.

In this group, therefore, we would consider cases of abortion, miscarriage and premature labour, and to the last of these I add, for purposes of simplicity in dealing with the matter, accidental haemorrhage. There seems to be a consensus of opinion that it is not an easy matter to produce a miscarriage by the application of force to a normal uterus. Kerr says that without a diseased condition of the endometrium, it is surprising how harmless such elements as fright, falls and injuries really are[24]; while Jardine[25] declares that a perfectly normal placenta might become detached, as the result of a severe/

severe accident, but that this was a very exceptional circumstance. Possibly the proper view to accept is that accident as a cause of such complications is rare in the absence of some already developed predisposing factor, but, that it can cause miscarriage without other predisposing factors, I am satisfied.

To effect such a termination of a pregnancy, the necessary degree of force varies considerably. One cannot lay down a hard and fast rule, for, after very severe trauma, cases are recorded in which the pregnancy was not involved, while other cases having sustained minimal injuries promptly miscarried. Leishman[26] quotes the case of Dr. Pagan, whose carriage ran over a woman then in the eighth month of pregnancy. She suffered severe contusions and fractures of limbs, yet the labour terminated normally at full time. Glaister refers to Tardieu's[27] case of extreme violence failing to dislodge a pregnancy. In that instance a peasant, with the object of inducing abortion in a girl whom he had seduced, carried her on his horse and galloped wildly to and fro, throwing her repeatedly to the ground. The effort was unavailing.

In a case of my own[28] the patient had placed a chair on top of a table and had mounted this in order to insert a coin in the gas meter. Losing her balance, she fell backwards to the floor, sustaining very severe injury to her back, left leg and left arm, yet in no way/

way disturbing her then six months' pregnancy. In another case, I recollect having seen a woman five and a half months pregnant, falling in a faint. She fell, quite flat on her abdomen, on the parquet floor in my dispensary, yet despite the direct and severe nature of this blow, no intra uterine damage was caused.

At the other extreme one meets, from time to time, cases in which the trauma has been so slight as to make it hardly credible that it should cause the uterus to expel its contents. In such instances it is my view that the etiological factor has not been the trauma, which has only been a stimulation, but that the shock, plus a possibly already existent predisposing cause, must be accorded a large degree of blame. Smellie[29] records a case in which a woman, two months pregnant, starting suddenly from her bed in surprise, soon miscarried. In this example there was a complete absence of trauma.

A case of my own is of outstanding interest in this regard. I record it rather fully. Mrs. B., aged 22 years was on 27/6/1921 in Bilsland Drive, Glasgow, when she heard a crash, but did not at the time actually see the tramway accident which caused it. The accident, a severe one, attracted her and she watched the injured being taken away. She went home in a "fearful state of nervousness". On the day following this experience she had some brownish discharge/

charge from the vagina but paid no great notice to it, although two months pregnant. On July 2nd she went on holiday, the discharge recurred and she aborted on July 4th. Urinary and serological examination gave no grounds for suspecting a systemic etiological factor and examination revealed nothing gynaecologically amiss. The previous obstetric history was, however, of great interest. She had been pregnant twice before. The first had ended as an early abortion after hearing a door suddenly slammed, the second terminated at seven months after a fright at the firing of a revolver in a theatre which she had attended.

Some three months after the loss following the tramway accident she became pregnant, but again the gestation was voided in the early months.

My view in this case was that the element of shock,superimposed on the abortion habit,was probably the explanatory factor.

Knowing that abortion, miscarriage or premature labour may follow stimulation so slight as in this example, we must never express the view that a loss after an accident did not occur because the trauma was insufficient. Such slight injury, for instance, as happened to another case with which I met, where, without doing much damage, a horse bit the tip of the shoulder of a pregnant woman who was passing in the street, may be sufficient as the exciting cause./

cause.

As we will see later, injury to the non-gravid woman may produce the early appearance of menstruation. It is my view that this discharge frequently results from injury to a corpus luteum,and when one realises that the rough handling of a corpus luteum of early pregnancy during abdominal section, or the removal of such a corpus luteum causes abortion[30] in the early months, it is quite conceivable that injury might cause early abortion in the same way. This view, of course, cannot be confirmed, but I see no flaw in it theoretically, and it would certainly satisfy those obstetricians who repudiate the possibility of traumatic abortion occurring in the absence of an established predisposing factor.

While Blair Bell will not grant the occurrence of abortion to be a necessary factor after the removal of such a corpus luteum of pregnancy[31],Kerr[32] expresses the view that it is possible that the cases upon which Bell founds his opinion, were operated upon at a period when the corpus luteum had ceased to function.

Frankl[33] of Vienna quite definitely expressed to me the view that all ovarian operations within the first three weeks of pregnancy caused abortion, that during the fourth and fifth week the same result probably occurred in all cases,and that it was only after the sixth week of a gestation that an operation of/

of this kind could be undertaken with any definite hope that the pregnancy would continue, which confirms Kerr's wider view on this question.

When one approaches a case in which one or other of these complications is said to have developed as the result of an accident, one must consider the various factors which, apart from trauma, could have produced the condition alleged. In this group these factors include abnormalities in development of the ovum, endometritis, albuminuria, syphilis, uterine displacements, uterine tumours, certain severe intercurrent diseases including the toxaemias, and habit.

For medico-legal purposes, we must therefore investigate very carefully the previous history with regard to similar complications, or complications which, though dissimilar, might result from the same predisposing factor. Proceeding, we must investigate the various functions during the current pregnancy. Routine examinations of the urine and serological examination of the blood must be made in all suspicious cases, though I make it my habit not to insist on serological examination in the absence of a suspicious history. The menstrual histories and internal examinations in these cases are always essential in order to exclude endometritis, fibroids, displacements and other local causes. Having thus investigated a case from the standpoint of history, one proceeds to the examination proper, which naturally varies with the/

the allegations of the claimant.

An important factor is the time interval between the injury and the expulsion of the pregnancy. The defence that abortion or premature labour occurs after an hiatus of such duration that alleged cause is too remote from effect,is a useful one. In early pregnancy the chance of an abortion becoming missed robs this line of much of its value. In the later months, however, when one can say definitely "I "examined patient after her accident; her child was "then undoubtedly alive, the interval between her "injury and her premature labour or accidental "haemorrhage is considerable, we must look for causes "other than the injury", the defender's case is greatly improved.

These cases can be divided as follows:-

1. Those in which it is feared the pregnancy has been involved.

The objects of the examination in a case of this first type include the investigation of whether the pregnancy is,or is not,still alive. One should note carefully if there has been bleeding, pain or discomfort, and if foetal movements are being appreciated. If the pregnancy is in the later months, its life can readily be confirmed by palpation and auscultation, but in the earlier months where no such definite findings are possible, cases of this type make it necessary for the examiner to see the patient again,/

again, after an interval of a month to six weeks, in order to appreciate whether uterine growth is, or is not, progressing. The importance of this will readily be realised by referring to the part of this communication which deals with the condition of missed abortion.

2. Those in which the pregnancy has been involved.

Pregnancy involved by trauma in the early months may lead to:-

(a) A threatened abortion.

(b) A missed abortion.

(c) An incomplete abortion.

(d) A complete abortion,

while those involved in the late months may lead to:-

(e) Premature labour.

(f) Accidental haemorrhage.

The investigation of these questions, generally, has been sufficiently stressed and only a few points relative to each particularly need be mentioned.

In the case of a traumatic involvement producing slight chorionic separation with bleeding in an early pregnancy, either this bleeding settles down and the pregnancy continues to develop, or the bleeding and attendant pain increase and the pregnancy is aborted, completely or incompletely. It is, unfortunately, very occasionally that the medico-legal examiner sees his case at this active stage and never, in my experience, have I, acting for defender, been given the opportunity/

opportunity of viewing the material passed.

Under circumstances so favourable as those I have suggested the diagnosis is simple and the prognosis may be given thus:-

Threatened abortion. A guarded prognosis should be offered, indicating the chance of the condition becoming progressive, but including the prospect that the pregnancy may continue to term. It is inadvisable to place any definite time on the duration of disablement, as some of these cases may necessitate absence from any duty during the balance of the pregnancy. One must never forget the possibility of a threatened abortion becoming "missed", a condition later considered.

Inevitable and incomplete abortions. The necessity for the emptying of the uterus should be indicated and, provided the general condition of the patient is satisfactory, and no infection develops, a disablement of twenty one days from the time of operation is generous.

Complete abortion. If the examiner is satisfied that abortion has occurred, and finds no complication, the case should be given the same period for recovery as those in the previous group.

Not infrequently examination is deferred so long that the doctor is unable to say if abortion has taken place. By the end of a fortnight the signs of abortion have become very indefinite, the discharge, possibly/

possibly never much, has cleared up, the softening and enlargement of the uterus has, to great degree, been overcome by involution, the vaginal pigmentation and breast changes, always faulty evidence, have retrogressed. The only definite evidence of recent pregnancy, villous particles in curettings, cannot be expected from these women. In such circumstances I satisfy myself that the uterus is empty, candidly confess my inability to endorse or repudiate claimant's story, and endeavour, by taking a detailed history of the occurrence to find some corroborative or contradictory evidence in the narrative. I make the habit of concluding my report thus:-
"Whether abortion did or did not occur, I cannot, at
"this late stage, say. Claimant is not now pregnant,
"and will be fit for work at the expiry of ... days
"from the date of this report".

If a woman, suffering from a threatened abortion were injured, and later, aborts, the question as to the effect of her injury upon the course of the threatened abortion becomes an extremely difficult one. The medical examiner is well advised to plead inability to distinguish the actual etiological factor in such abortion and to steer a middle course.

All this applies equally to expulsion of the uterine contents in the later months but here the child, if it lives, aids us considerably in our investigation. The importance of this is dealt with in a/

a later chapter. In these cases, particularly in a primiparous woman, the signs of recent childbirth are of longer duration and greater collective value.

Accidental haemorrhage, or the bleeding from the sinuses exposed by the separation of a placenta situated normally in the upper uterine segment, is a condition not infrequently associated with severe toxaemia and heavy albuminuria. This toxic state simplifies separation after injury. These cases should be treated, from the point of view of the medico-legal examiner, as advanced threatened abortions, the maternal and foetal prognosis in the threatened type being guarded, while in the more severe cases, where the bleeding is concealed, or where premature labour is set up with considerable loss of blood, the immediate prognosis should be grave, and full provision made for a long anaemic convalescence in the event of a satisfactory termination.

Rupture of Uterus.

As the result of the application of force, direct or indirect, the uterus may be ruptured at any time during the course of a pregnancy. The larger that organ becomes the more liable is it to trauma, and in the late months a sudden blow on the abdomen, penetration by a pointed instrument or the compression of the mother as in a buffer accident, may cause this condition. That it may ensue as the result of indirect/

ect violence is well illustrated by Kerr's[34] case of a girl of seventeen, who being in labour, jumped from a window, falling on her feet some eighty feet below. The fundus uteri had a rupture five inches long where the foetal limbs had been forced through it in a species of contre coup.

The outcome of this very serious accident is frequently fatal, and all cases demand urgent surgical attention. Death may result from shock, acute anaemia or in cases where the uterus has been perforated, sepsis. In the event of the injured mother surviving, the duration of her disablement will be a varying one.

MISSED ABORTION.

Missed Abortion.

The condition of "Missed Abortion" is one which is of particular Civil Medico-Legal interest. This condition is much more common than is generally imagined, as demonstrated in the practice of the Maternity Hospital, where I have frequently met with these cases.

Briefly a Missed Abortion is a case of pregnancy in which for some cause the young uterine contents die, but in which the dead products are not forthwith expelled, but are retained in utero for a varying period. The contents become surrounded with blood clot to form the mass known as a "Blood Mole", which later is discoloured to form the typical "Fleshy "Mole". In some of these cases the smooth lining or amnion of the ovum is depressed by haemorrhages under it producing the "Haematoma Mole". These various conditions can all be definitely recognised by pathological examination and, if the material passed is available, the examining doctor should have such an examination performed.

The diagnosis of missed abortion is not difficult, but it always necessitates two examinations made at an interval of four to six weeks. The usual story is as follows:-

Patient has had a fall and fears her current pregnancy may have been involved, or, possibly she may have had bleeding similar to a threatened abortion, or, without any such history, patient may complain that she has/

has not noted any abdominal enlargement, nor has she felt foetal movements, though her stage of pregnancy would warrant such manifestations. The examination in this instance should include full details of the previous obstetric history as to abortion or prematures, in other words, the questionnaire should be constructed so as to discover if there is any suggestion of old-standing venereal infection. Again the other causes of intra uterine death, such as albuminuria, must call for full investigation and elimination. The last menstrual date should be taken, and careful enquiries should be made with relation to the type and duration of the menstrual flow, and whether the last period was in every way a normal one. The other symptoms of pregnancy expected by that date next call for consideration. Then, and only then, should the examination be made.

It will be found that the uterus is enlarged and softened, but not to the extent expected by a consideration of the history of the last menstruation. Breast signs should be in a state of retrogression or altogether absent, although, as I have pointed out earlier, these are really very unreliable. A diagnosis should not be made at this examination. If for no other reasons than those indicated by the following case, delay in offering an opinion, and more particularly caution in proceeding to operative interference, is advisable.

An/

An unmarried girl, pregnant for the third time, called at my dispensary giving me a history of having, three months before, had a threatened abortion which had been treated by her doctor. Since then she had felt quite fit but she was not growing nor had she felt movement. On examination I discovered that the uterus was enlarged to a size corresponding to a three months' pregnancy. I instructed her to return in one month when, on examination, I discovered that the uterine growth had progressed. She later confessed to having hoped that induction of abortion would be practised under ideal aseptic conditions, on what appeared legitimate grounds, and that she could thus rid herself of her embarrassment.

The second examination, if the case is one of missed abortion, will demonstrate no change from the findings of the first occasion. If there is change occurring in the uterine contents, such as maceration, mummification, lithopedian formation, or septic infection these cases may have a dirty brownish discharge and the patient may suffer general malaise, anaemia, loss of flesh and a slight rise of temperature in the evening.[35]

In all accident cases, then, where the youth of the pregnancy precludes a diagnosis of foetal life, whether there be a history of uterine bleeding or not, the examiner should bear Missed Abortion in mind, and indicate in his report the desirability of a second examination/

examination at a later date.

When diagnosed these cases should be treated by dilatation and removal of the uterine contents. Following an uncomplicated operation the patient should be fit for work in twenty one days.

THE TOXAEMIAS OF PREGNANCY AND INJURY.

The Toxaemias of Pregnancy and Injury.

The continued ignorance of medical science regarding the etiology of the Toxaemias of Pregnancy suggests the necessity for approaching cases where, following an accident, a toxaemia is discovered, with the greatest caution. The most one can assert in a witness box is that so far as our present medical knowledge goes, accident is not a causative factor in these conditions. A jury, sympathetic to the claimant, is not ready to accept a bald statement of this type, and it is as well to have brought out in examination the bolstering facts that injury is not advanced as a causative factor in the toxaemias by any of the standard authors, that the changes found post-mortem in the liver and kidneys in toxaemic cases are quite different from any lesions found after injury, and that similar conditions are never found in male patients subjected to injury. Such negative proof is of greater value in a jury trial than the expression of an opinion qualified, of necessity, by the limited medical knowledge in the field in question, and therefore one upon which cross-examination is likely to be extensive and searching.

Had there been any relationship between injury and these obscure conditions the profession would have offered, in almost every case of hyperemesis or eclampsia, the sad story of the accident suitably garnished by the patient and her relations. The absence/

absence of such history in the toxaemic cases, is, to my mind, the final proof of their never arising from injury.

With some finality then, we can assert that injury cannot cause a toxaemia, but the suggestion that the application of trauma may make a patient more prone to a toxaemia, or may intensify a current toxaemia, cannot be repudiated. It has been accepted in a court of law that nephritis may follow bodily injury not directly involving the kidney[36], and, if the pursuer would suggest that a kidney so involved had been the predisposing factor in her subsequent eclampsia, the defender would experience the greatest difficulty in repudiating the allegation.

No theory is too involved for the purposes of the speculative lawyer, who confers with his medical inventors in these cases to a degree which might profitably be emulated by those of established reputation. For example, in a case in which I was interested, an injury sustained at seven months was submitted to a jury in the Court of Session as the causative factor in the production of an occipito posterior position at delivery. The theory for pursuer, supported by medical evidence, was that the shock sustained so involved the nervous system, that stimulation to the uterine muscle was faulty, and the resultant defective muscle tone permitted the uterine contents to adopt an abnormal relationship to the uterine ovoid. Such an example of ingenuity/

ingenuity as an explanation for a simple third vertex case demonstrates the immense field offered by the toxaemias for similar gymnastics.

Imagine the result if hyperemesis was associated with injury. One can construct such a plausible case for it under the following circumstances. A woman, early pregnant, falls and, very shortly after, develops vomiting of marked degree. This passes later to the toxic type with its attendant serious changes. Examination reveals the uterus, three months pregnant, in retroversion. Such a case could be reconstructed thus:- in falling, claimant sustained a traumatic retroversion of uterus which stimulated a reflex hyperemesis, later assuming the serious toxic type.

To take a more simple line of action, and one equally difficult to answer, let us suggest that the injury produced the familiar "severe shock to the "nervous system". Hyperemesis of neurotic type, if alleged in such circumstances, would be very difficult to dissociate from the injury, to the satisfaction of a jury.

My object in inventing these cases is to suggest the measures necessary to circumvent such misplaced genius as one from time to time experiences in our courts.

The whole secret of success in answering such allegations lies in the opportunities offered to and accepted by the medical examiner for defender. The examination/

examination should be made as soon after the accident as possible, before, in fact, pursuer's agent has decided that he has a passable case. In most of these cases the toxaemia will not have developed prior to the examination and, if it later appears, defenders have the advantage of utilizing the defence that it was too remote to arise from the trauma. It is in cases of this type that the routine examination of the urine and nervous system is invaluable. The medical witness who has to confess the omission of such examinations is better never to have entered the witness box. I have experience of such neglect in a case in which heavy damages were given, where I was satisfied none were due. Pursuer had tripped over a defective pavement when four and a half months pregnant. The doctor, who examined her within a week of her fall, described her injuries which were all trivial, and mentioned that she was pregnant, but neither investigated the pregnancy nor the condition of the urine. Some ten weeks later pursuer delivered herself prematurely, the labour being attended by ante-partum haemorrhage of severe degree. I first saw claimant months after these events, when she was apparently in normal health. Her uterine growth had continued up to the accident, she appreciated foetal movement up to the advent of the haemorrhage, and her doctor's evidence as to the development of the child ruled out any chance of the uterine contents having been killed at the time of the injury. She had, for/

for two or three weeks before her haemorrhage commenced, been subject to headaches, sickness, oedema and dimness of vision, but even her own attendant had not made an urinary examination.

This premature labour with accidental haemorrhage was, I am satisfied, due to toxaemia independent of her accident, yet our inability to prove that the pregnancy was uninvolved at the time of the first examination, and that the urine was then normal, lost us the case.

In contrast to this, I would cite a case in which an action was successfully avoided by full examination. The full record of the reports thereon will indicate the manner in which cases where an aggravation of a current toxaemia is alleged should be treated.

8, Park Quadrant,
GLASGOW, W.,
25th Nov., 1920.

<u>4310/20 - Mrs. C.</u>

In accordance with instructions from The General Manager of the Glasgow Corporation Tramways, I, on Monday 22nd November 1920, proceeded to 383 Janefield Street, Parkhead, to make an examination of Mrs. C. of that address with reference to an accident alleged to have been sustained by her on 8th November, and more particularly with regard to the effect of the alleged/

alleged accident on her current pregnancy. On that occasion I found that claimant was out, visiting the Dispensary of the Maternity Hospital. I visited again on November 23rd, and made the examination.

Patient's Statement. On 8th November, patient was on the rear platform of a car, preparatory to leaving, when the car stopped suddenly and she was thrown on her back, falling on the flooring of the inside of the car. She was on her way to the Maternity Hospital at the time, and was assisted there immediately.

Present Complaints. Patient now complains of pain in her back and headaches.

Examination. Claimant, R. B. C., is 27 years of age, and is at present pregnant. This is her fourth pregnancy, only one of these having proceeded to full term with a living child.

Menstrual History:- Patient's periods were painless, attended by moderate loss of blood, and lasted for four or five days, recurring every twenty eight days. Her last period was on May, 22nd.

Previous Obstetric History:- Her history is medically a very bad one. It is, in brief, as follows:-

1st pregnancy: eclampsia, six months premature, stillborn.

2nd " : eclampsia, full time, stillborn.

3rd/

3rd pregnancy: Full time live child, died
aet. fourteen months.

Examination reveals the abdomen to be enlarged. The uterus is enlarged so as to reach the level of the umbilicus. This corresponds to the pregnancy having proceeded about six months, which agrees with her menstrual dates, and with the date on which patient first experienced sensations of movements, i.e., 4/10/20. There is no pain over the uterus, which is not hard or resistant beyond normal. The foetal parts are felt distinctly, and distinct foetal movement per abdomen can be appreciated. The vagina and cervix are normal for a woman who has had children. There is a slight old tear of the perineum. Enquiry reveals that there had been no haemorrhage. The foetal heart while faint, can be heard, normal in rate and regularity. While making my general examination I took the opportunity of palpating the back while patient thought me otherwise employed, and there was apparently no pain caused; there is no local sign of back injury.

Urinary examination:

Specific gravity: not found, quantity insufficient.

Reaction: acid.

Albumen: heavy deposit, reacts to heat and cold (HNO_3) tests.

Pus, blood, sugar, nil.

<u>Opinion</u>./

Opinion. Examination has revealed that the foetus is alive, that the growth of the uterus corresponds to patient's dates, and that there has been no apparent haemorrhage. Urinary examination reveals the fact that patient has albuminuria in marked degree. I made a further examination of patient's urine on 25/11/20 when my previous findings were confirmed.

I am convinced that patient's pregnancy has in no way suffered as the result of her accident, and that any complication developing will be a thing apart from the accident.

In view of my findings in the examination of the urine I advised patient to go into hospital where she now is. Her condition is a serious one, in that the kidney condition may cause (a) the death of the foetus (b) premature labour, (c) eclampsia, (d) haemorrhage.

Further Report on Mrs. C., aet. 26, 383, Janefield Street, Parkhead, by the Surgeon who attended her in hospital.

Mrs. C. was admitted to my wards in the Royal Maternity Hospital on 25th November, 1920, with her face and feet slightly swollen. There was a story of a tramway accident some fourteen days previously but there were no bruises to be seen. She was pregnant about six months. Her kidneys, as judged by albumen/

albumen in the urine, were not healthy. Under treatment, the albumen in the urine diminished though it still persisted to a slight degree. On 22nd December 1920, she went home feeling very well and was to continue the treatment at home.

On 30th December, 1920, she was readmitted with feet and face more swollen than when previously admitted and a much higher percentage of albumen in the urine. On 3rd January, 1921, about 1 a.m., Mrs. C. told the nurse that she felt she was going to have an eclamptic fit. She was correct as she shortly afterwards had an eclamptic fit, became unconscious and died at 2.15 a.m. on that day.

She had eclampsia with two previous pregnancies.

<u>In my opinion</u> her death was due to eclampsia, which, as far as medical science is able to say at present, cannot be caused by an accident but the accident may have aggravated her condition of ill health.

<u>Further Report on Mrs. C., aged 26, 383 Janefield Street, Parkhead, by House Surgeon in charge of case.</u>

This patient was admitted to my ante natal ward on 25th November last, for treatment for albuminuria. She was then six months' pregnant and gave a history of eclampsia at two of her three previous/

previous confinements, the first resulting in a premature labour at six months, the second in death of the foetus at full time. Her third child born in March, 1918, was born alive. She remained under treatment for four weeks and the albuminuria became and remained very slight in degree for a week before she was dismissed on 22nd December. She was given instructions at that time regarding diet, and the necessity of reporting herself weekly for urinary examination. Eight days later, on December 30th, 1920 she was readmitted, the albuminuria having returned to a much greater degree than before and was at once put under the necessary treatment. She was apparently progressing slowly when she became conscious of the feeling of an impending eclamptic fit and at about 1 a.m., on the morning of 3rd January was removed in a severe fit to the labour ward where immediate steps were taken to bring her round. Death occurred at 2.15 a.m. and was due to sudden cardiac failure, the patient never having regained consciousness.

8, Park Quadrant,

G L A S G O W, W.

11th January, 1921.

<u>4310/23 - C.</u>

I extend my report of 23/11/20, in the case of Mrs. C., 383 Janefield Street, as follows:-

As/

As I advised, patient went into the wards of the Glasgow Maternity Hospital on 23/11/20. There was then a considerable amount of albumen in her urine and she had slight oedema or swelling of her feet, hands and face. Under the usual treatment her condition improved slowly. I saw her frequently while she was in hospital, and knew that she was dismissed greatly improved on 22/12/20. She was then instructed as to the continuation of her dieting and treatment at home, and advised to report every week with a sample of her urine for examination.

Unfortunately I was from home, and have to resort to the hospital records for the rest of patient's history. On reporting as instructed, it was found that her oedema and albuminuria had both returned in greater degree than at the time of her first admission. This was on 30/12/20, when she was again admitted and started afresh on appropriate treatment. Early on the morning of 3/1/20 she was seized with an eclamptic fit, and she died thereafter without regaining consciousness. There was no post-mortem examination.

<u>Opinion</u>. It is extremely unfortunate that one of the fears I expressed in my report of 25/11/20 viz. the onset of eclampsia, should have been realised and deeply regrettable that it should have been attended by a fatal result. At the same time, considering the/

the previous history in this case, along with the persistent albuminuria, I cannot say that the conclusion is in any way surprising.

In considering patient's case from the time of my first examination there are several points worthy of more than passing notice. I mention them here in detail:-

(1) The accident occurred on 8/11/20, death on 3/1/21, almost two months later.

(2) At the time of her first examination patient showed no sign whatever of injury, external or internal.

(3) That, then, having found albumen in her urine I sent her into hospital, where I saw her steadily improving until her dismissal on 22/12/20, when she was greatly improved and feeling quite well.

(4) There was a very bad previous history of eclampsia associated with patient's confinements.

Consideration of these facts, in conjunction with the observations I have made since first I saw patient, confirms the opinion which I have already expressed, that the accident in no way influenced the course of patient's pregnancy. It is my opinion also that the accident, quite apart from being the causative agent of, had not even a predisposing influence in patient's death.

On Soul and Conscience,

8, Park Quadrant,

G L A S G O W, W.

11th January, 1921.

<u>4310/20 - C.</u>

I have, at the request of the General Manager of the Glasgow Corporation Tramways, considered the medical reports of Doctors A and B of the Maternity Hospital regarding Mrs. C. of 383, Janefield Street, and, submit herewith a statement co-relating these reports with my own reports on this case.

(A). <u>Report by Dr. A.</u> This report is but a statement of fact, and the Doctor does not venture an opinion, in fact she gives no history of accident. I would emphasise the following points of importance:-

(1) During a stay in hospital for a month, patient was treated only for albuminuria and no mention of injury following an accident is made.

(2) There is no note of any pains or aches, and the urine was tested often but the presence of blood is not recorded.

(3) The albuminuria was persistent.

(4) There is the history of previous eclampsia on two occasions.

(5) Death was due to heart failure and eclampsia.

(B). <u>Report by Dr. B.</u> From this report I note:-

(1) That heads, 3, 4, and 5, of Dr. A's report are confirmed.

(2)/

(2) That although Dr. B was aware of an accident having taken place, he found no sign of injury, and treated patient only for albuminuria.

(3) That Dr. B states that "death was due to "eclampsia which, as far as medical science is able "to say at present, cannot be caused by an accident".

(4) and continues, "but the accident may have "aggravated her condition of ill health".

These two reports are quite compatible with my reports on this case, except in the conclusions of the report by Dr. B. I cannot agree with paragraph B.4. I am of opinion that patient's accident in no degree contributed to her death, and in support of my opinion I submit the following facts:-

(a) When I examined patient on November 23rd she had nothing amiss, apart from the albumen in her urine, and this gradually improved until she was dismissed on December 22nd.

(b) Between November 25th and December 22nd patient was under observation in hospital, and during that time neither Dr. B nor Dr. A noted any other abnormal condition.

(c) The death did not take place until almost two months after the accident, during which time I note, no observation of injury appreciated by any of the attendant doctors, no complaint of pain or discomfort mentioned, and the statements that patient was greatly improved, so far as her albuminuria was concerned/

concerned when she was dismissed on December 22nd.

The previous history, the persistent albuminuria, and the death are all in perfect pathological sequence, without the consideration of the accident, the introduction of which as a cause does not correspond to my opinion which is moulded on the standard teaching: nor does its inclusion as a contributing factor correspond with the observations I made during my examination of patient.

On Soul and Conscience,

In cases where a toxaemia is present at the time of the examination the opinion should include paragraphs dealing with:-

1. the impossibility of such toxaemia resulting from injury;

2. the possible serious outcome, maternal and foetal, of the condition and the advisability of instituting suitable treatment;

3. the fact that patient's lowered resistance makes her more liable to injury, and the expression of an opinion as to whether the injuries are such as to accentuate or aggravate the current condition ; and

4. a final paragraph or a covering letter which should emphasise the necessity for further examination or examinations.

When such later examinations are performed one should note particularly:-

1./

1. The advance or retrogression of the disease, paying special attention to:-
2. The time when it is cured, or
3. The persistence of the symptoms in lessened degree.

Whenever a toxaemia clears, one can assert that the effects of the accident have passed off, but while it remains, even in lessened degree, one must always be prepared to face the suggestion that this was the result of the aggravation of traumatism, a possibility which defies denial.

In these toxaemic cases it is not the cases of a serious nature, the hyperemesis, eclampsia, acute yellow atrophy class, but the minor toxaemias which most frequently present themselves. Degrees of toxic neuritis, intercostal, dorsal, brachial and sciatic types, are seen from time to time but these are, generally, transitory things with no permanent or serious results so do not call for more than passing mention.

Where a toxaemia develops after the initial medical examination any further medical opinion should include the following heads:-

1. the repudiation of the suggestion that a toxaemia of pregnancy can result from injury;
2. the reiteration of the fact that at the time of the first examination there were no clinical signs of toxaemia;

3./

3. the importance of the hiatus between the accident and the appearance of the toxaemia; and
4. The mention of any previous history of toxaemia or factor tending to it with the liklihood of its recurrence, as also the fact that toxaemias usually appear in a pregnancy apart altogether from a history of injury.

Fitness for work in the minor toxaemias is always a matter of opinion, but whenever a major toxic change has been manifest its presence should render the patient unfit for work for the currency of her gestation and puerperium. Her fitness after that is a matter for the decision of the physician.

THE NEW BORN CHILD.

THE INVESTIGATION OF PREMATURITY.

The Investigation of Prematurity.

A frequent allegation is that, as the result of injury, the claimant suffered premature labour, and, as we have seen in the earlier pages, this may be the case. The unreliable nature of the menstrual history as recorded by the average woman should warn one against accepting the mother's statements in these cases. The nurse in attendance, the patient's friends, and the medical attendant are, not infrequently, only too ready to corroborate the dates which claimant submits. I recall the fear of prematurity being expressed in a case in which the dates were confirmed by the claimant's sister who suggested she could vouch for them through having noted, from the absence of stained garments in the washing, the time at which claimant's periods had ceased[37]. Another case, one of alleged prematurity[38], was supported by a midwife who said she could produce her books in substantiation of claimant's story. She became less dogmatic, however, when questioned as to what special precautions she had taken in the after care of the premature infant.

The history of these interrupted pregnancies should be investigated with special enquiry as to the date of the mother's last menstruation, and should include full records of any abnormality during labour, such as the ante-partum haemorrhage or the delay in the third stage not uncommonly found under such circumstances[39]. While the presence of either of these conditions/

conditions strengthens the presumption that the labour was premature, either, or both, are not inconsistent with a labour at term. The questionnaire should be continued along the lines of enquiry as to what steps were taken in the care and feeding of the infant to counteract the prematurity[40].

These enquiries should primarily be so couched as to convey the impression that the examiner is very naturally curious as to the child's well-being, but should he suggest that any abnormality, digestive or otherwise, is the result of faulty nursing, he may elicit the most valuable information. In one of my own cases a mother and nurse became so indignant when I suggested that a child, alleged to be five to six weeks premature, was debilitated because of insufficient bathing, that they indignantly emphasised the fact that it had been bathed morning and evening since its birth[41]. Again, the suggestion that feeding is not being properly conducted will produce much more accurate information than honest inquiry as to type and nature of feeding. In this way one can easily find if the child is able to feed itself, and any gross faults in the foods or their administration are accurately located.

The digestive and excretory functions should be investigated, and the motions, if available, inspected for the presence of signs of intestinal disorder.

Then/

Then the child should be examined. When stripped, its length and weight should first be recorded. The normal full time baby is twenty[42] inches long and weighs seven and a quarter[43] pounds, but there are great variations in this as the statistics of any lying-in hospital will demonstrate. Riggs, in seven hundred and seven full term pregnancies at John Hopkins' Hospital, found that the lightest mature child weighed four pounds twelve ounces and the heaviest ten pounds, while the average was 7.32 pounds[x][44]. It is found that as a rule the size of the full time foetus is greater with each succeeding pregnancy, and that a well nourished mother has generally a well developed child. Mature twins are almost invariably smaller than other children.

In this respect we note that in these extreme cases of contracted pelvis kept under observation in Hospital for the month prior to labour, in order to be available for Caesarian Section, the mothers have, generally, a heavier child than the average case at term.

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[x]Glaister[45], gives the average weight of the full time child as about seven pounds, and the average length as varying from eighteen to twenty four inches.
In the cases in my group E here the weights varied from six pounds seven ounces to eight pounds eight ounces, and the lengths from nineteen to twenty one inches in full time children.

The normal full time child should have abundant subcutaneous fat under a smooth skin, from which the downy lanugo has vanished, except between the shoulders, and over which is spread the lardy, vernix caeseosa. In the male child the testes are present in the scrotum as a rule, while in females the labia majora are well developed and conceal the rest of the genitalia[46]. The finger nails are developed to the extent of projecting beyond the finger tips. The head is well developed, the sutures being in close apposition, and the bones advancedly ossified, though the occipital bone is still divisible into four osseous parts[47]. Fine hair is found on the scalp.

In prematurity these findings are lacking, the skin is red, there is an absence of subcutaneous fat, the child appears puny and has a weak cry. Not infrequently these children cannot feed themselves, and very readily develop gastro intestinal disorders.

X-Ray examination for the centres of ossification may be applied in some of the cases in this group. The failure of the rays to demonstrate the ossification centre in the lower femoral epiphyses does not prove prematurity, but the presence of that centre decides maturity. Williams quotes Hartmann as noting its absence in twelve out of a hundred and two full time labours, and this I can to an extent support by an unique case in which full time infant twins, which had lived, were found in a local park. At/

At autopsy the femoral epiphyses of one child were very well developed, while those of the other were hardly appreciable[48], thus demonstrating the uncertainty of establishing maturity by this one finding. One decides that a child is mature when one has a sum of these findings described above.

INTRA UTERINE INJURIES TO THE CHILD.

Intra Uterine Injuries to the Child.

That a foetus in utero may be injured by the application of trauma to the mother is accepted[49, 50, 51]. In my series of cases, in many of which the maternal injuries were very severe, I have not had the fortune to meet an example of this, though I have frequently experienced foetal injuries sustained inter partum, many of which might quite readily have been attributed to externally applied trauma.

Judging by the negative nature of the evidence in my group of cases in which one would have expected to meet this condition, and by the paucity of the literature on this subject, trauma applied to the mother is a most infrequent etiological factor in foetal injuries.

The production of intra uterine injury may follow force applied directly to the uterus, as in Burdach's case[52], or indirectly, as in Jardine's case where the force was applied to the mother's back[53]. Glaister[54] quotes a splendid example of this second type when he describes Bolt's case in which the patient, a primipara in the first stage of labour, but with membranes unruptured, jumped from a window. The injuries produced in her child were in the form of cranial fractures at those parts where the head impinged, by a species of contre coup, on the pelvic brim in which it had been engaged.

The/

The factors governing the infrequency of such ante-partum injuries are the support and shelter given to the foetus by the pelvis, lumbar vertebrae, lower ribs and anterior abdominal wall, the resistance of the elastic uterus, and the padding effect of the protective liquor amnii. Of these, the last factor is all important.

Given sufficient trauma, suitably applied, there is no limit to the injury which may be inflicted on the unborn child, but with equal trauma, similarly applied, there would be a greater chance of injury in the case of a thin woman, or in one with a pendulous abdomen, or an ill supported uterus with an element of oligoamnios.

One can readily imagine that the average case would demonstrate severe abdominal bruising, accidental haemorrhage, premature labour, or even rupture of uterus prior to the child being damaged, let us say, to the extent of sustaining even a simple fracture of a long bone.

Practically all the literature is confined to the presence of intra uterine fractures following trauma[55]. Ehrenfest[56] mentions intraperitoneal haemorrhages in the foetus following externally applied trauma, but it is noteworthy that he does not quote a single case. He is in addition guarded to the extent of suggesting that such haemorrhages from ruptured viscera may be of intranatal production.

Leishman/

Leishman[57] cites a case from Cazeaux in which a slight trauma, caused by the mother walking against the edge of a table when six months pregnant, produced premature labour. It was noted that just before the delivery the foetal movements became very marked and that the child, which was stillborn, presented on its back an ecchymoses as large as the palm of the hand.

When we recall the fact that, as the result of osteogenesis imperfecta[58], intra uterine, interpartum and post natal fractures are produced without trauma, and that amniotic bands, oligoamnios, the pressure of a fibroid tumour, and compression of the unborn child by the umbilical cord are all said to contribute to the etiology of intra uterine fractures[59], then we must very carefully read those cases recorded as resulting from trauma. Like cancer of breast and an old blow, it is easy for a woman whose new born has a fractured skull to recall a blow during the late months, thus manufacturing a cause for the effect.

Repeatedly I have seen cranial fractures in cases of contracted pelvis of the flat type where labour terminated without interference, and one outstanding case, in my hospital practice, was that of a patient with a justo major pelvis who delivered herself, without aid, of a large child presenting by the face in a mento anterior position. A large depressed fracture/

fracture of the right frontal bone resulted. I am confident that had that patient sustained trauma prior to her labour, and had the actual delivery not been observed in hospital, that the preceding injury would have been considered causative.

It is my considered belief that many of the cases recorded as having been exposed to injury without interruption of the pregnancy, and in which, at labour, foetal injuries were discovered, had factors other than trauma externally applied in their production.

My view as expressed on fractures applies equally to other injuries which may be alleged to have been similarly produced.

That trauma should produce such conditions as hernia, cleft palate, and hare-lip, to mention but a few of the conditions occasionally attributed to it, is too manifestly absurd to call for discussion.

No matter how dogmatic a medical witness may feel in a case involving an allegation of intra uterine injury to a child, he must realize that he must submit his case to a mind or minds uninstructed in medical matters. If a child has a definite injury and the pursuer suggests that it resulted from trauma, it is insufficient for the medical witness for defender simply to deny the allegation; such a denial must be substantiated by logical reasons for his attitude, explained in such a way as to impress the lay mind.

In/

In approaching a case of this type, it is desirable, after having taken the history, to examine the child, and to follow this with further enquiry, directed with a view to deciding if the condition was produced during labour, after labour, or before labour.

The consideration, in this sequence, of injuries found in the new born child has the advantage of classifying the causative factors in their order of frequency. Then the various etiological entities under each head should be investigated until all are arrayed. This method of report formation is well exemplified in a case of my own, (E. 4.) in which it was alleged that, in addition to prematurity, convulsions, which had developed, also resulted from trauma.

The following findings were noteworthy:-

Inter-partum.

1. The labour was terminated by forceps delivery, there being no indication, on the Doctor's admission, for their use, with a consequent unnecessary exposure of the child to inter cranial pressure.

Post partum.

2. The child, six weeks old, was being fed every two hours, a frequency calculated to produce intestinal disorder, which disturbance was confirmed by the presence of green stools.

3./

Ante-partum.

3. The alleged trauma to the uterus was of indirect variety, the injuries being confined to the lower third of one thigh.

In the presence of a forceps delivery, unnatural frequency of feeding and definite evidence of digestive disorder, conditions accepted in the etiology of infantile convulsions, no jury would accept the very unusual traumatic theory.

Where, very shortly after an accident, labour, with or without ante-partum haemorrhage, occurs, the circumstances are altogether different, and injuries found in the child so born may result from the trauma. Even in these cases, however, the medical examiner should keep other factors in mind.

TRAUMA IN GYNAECOLOGICAL CONDITIONS.

TRAUMA AND EXTERNAL GENITAL PATHOLOGY.

Injury to the External Genitalia.

The primary results of injury to the external genitalia are bruising, or the production of wounds, but such conditions, by secondary infection, may lead to conditions of greater severity, including vulvitis, ascending infections of the genital tract, or even a fatal septicaemia.

In conducting a compensation examination of a case with alleged vulvar injuries, one must always guard against a condition of long standing being attributed to the trauma. A professional friend[60] permits my illustrating this point by a case of his which is of unusual type. The claimant had been run over by a motor car, and it was alleged that the starting handle of the car, coming into forcible contact with her genitalia, had injured her, with the result that she had developed incontinence of urine. The examination, conducted some time after the alleged injury, demonstrated a degree of hypospadias, a congenital deficiency of the lower wall of the urethra. Here, a condition present from birth, was said to have followed the accident.

Bruising and wounding of these parts vary somewhat from similar trauma elsewhere in the body, on account of their highly developed vascular supply. So very vascular is the vulva, that a patient, seen immediately after an injury, may show haemorrhage or ecchymoses out of all proportion to the force applied.

The/

The bleeding is most severe when the erectile tissue in the region of the clitoris is involved, and frequently repeated ligation may be necessary in controlling the flow. A colleague[61] in a case to which he was called found his patient bleeding profusely from a wound of the clitoris produced by axis traction forceps. Apart from the local disturbance, this woman had all the symptoms of an acute anaemia, and might quite readily have died. An extreme anaemia of this type would predispose to an infection of the wounds by lowering the patient's resistance.

Though the skin be not broken the vulvar vessels may rupture with the formation of a large haematoma. This is, of course, much more likely in the pregnant state, or where the victim has varicosities of the parts. Apart from Obstetric practice I have only once seen such a haematoma. This example was in a child, and the general swelling of the parts following the injury led to a retention of urine with the necessity for catheterisation.

Such wounding, if uninfected, rapidly heals and, unless very extensive, seldom leaves disablement. If the urethra or the duct of Bartholins' gland be involved, however, the possibility of urethral stricture, or the formation of a Bartholinian cyst respectively, must not be overlooked.[62] Epidermal inclusion cysts may also follow injury.

Haematomata/

Haematomata, if remaining free from infection, are ultimately absorbed, but, not infrequently, such blood tumours are invaded by pyogenic cocci and form abscesses which may point or require incision with subsequent drainage. A sequel of this type will very considerably prolong the convalescence of the patient. Frank quotes a case described by Rolnner[63], where the haemorrhage from a ruptured vulvar haematoma proved fatal.

Infection of a vulvar wound or haematoma may explain the presence of a vulvitis following an accident, and such a state of affairs may become severe, leading to ulceration with extensive destruction of tissue, and the production of Gangrenous Vulvitis[64], or Erysipelatous Vulvitis[65], while fatal septicaemia is not unknown[66].

Following a traumatic vulvitis one may have permanent disablement if the healing of the parts produces much scar tissue. Atresia and vulvar adhesions are possible, and Bartholinian cyst formation after a traumatic Bartholinitis is described by De Lee[67].

Tuberculosis Vulvae, an extremely rare condition, and one found as a rule secondary to a tubercular infection of the genital tract, syphilis in its various forms, and gonorrhoea cannot be caused by accident, but trauma may be the stimulation necessary to light up such latent conditions. The same law governs simple and malignant neoplasms which may be adversely affected, and degenerate as the result of trauma.

A/

A group of pathological states, not truly vulvar, is worthy of note. These conditions are those swellings which pass into the vulva via the inguinal ring, and include inguinal hernia, fibroid of the superficial part of the round ligament, and Hydrocele of the Canal of Nuck. Only the first of these may result from injury, and such a cause is exceedingly uncommon. All the dubiety cast on the traumatic production of hernia in the male must be intensified, for the round ligament is present in the female inguinal ring, acting as an additional support. When a hernia of this type follows trauma the injury is only the exciting cause, there having been a pre-existing congenital weakness. Hernia as the result of accident is a favourite allegation, and it is the duty of the medical examiner, in inspecting a case where this condition is alleged, to examine the part with the object of deciding the age of the protrusion. When the following findings are present it may be asserted that the hernia is of old standing.

1. The swelling is of large size.

2. It descends well into the labium.

3. It is painless on handling.

4. It slips back readily into the abdomen, revealing a gaping inguinal ring.

5. It is partly or wholly irreducible as the result of adhesions. Omentum will probably be in the sac.

6./

6. The abdominal walls are weak, probably overladen with fat, and other hernial openings may show evidence of laxity[68]. Collie, to whom I have referred for this excellent epitome of the signs of old standing hernia, also suggests the advisability of instituting careful examination for the marks of a truss in such cases.

Garrigues[69] describes a case of haematoma of the vulvar part of the Round Ligament, a condition which might follow trauma, while relative to Haematocele of the Canal of Nuck, he says, "If Hydrocele of the "Canal of Nuck is rare, Haematocele of the same is "unique".

After vulvar injury the date of return to work varies with the degree of tissue destruction, and the absence of infection. Generally speaking the patient should be fit for work almost from the time healing is complete in a wound, or when a haematoma has completely absorbed.

When urethral stricture follows, operation is necessary, while the same must hold for atresia or adhesions of vulva following vulvitis. These operations are both of a type which may not give results at the first attempt, and I have known an atresia, following extensive puerperal vaginal and vulvar sloughing, which quite defied repair. Despite the almost complete obliteration of the vagina - a sound could not be passed - the patient became again pregnant. She was delivered/

delivered by Caesarian Section, and Sub Total Hysterectomy was essential to obviate the difficulty of drainage.

Traumatic Bartholinian cyst, on the other hand, may not call for surgical measures if its size is not causing the patient inconvenience.

Traumatic Vulvitis, when extensive and severe, may be very slow in healing, and, if the glands of Bartholin become infected, and require incision and drainage, such a condition may keep a patient off work for many weeks.

The ability of a patient with hernia for work is again a vexed question. I consider it best to take a narrow view on this point, and would sum up the position by saying that fitness for work should be certified when the hernia is of such type as to permit it being completely controlled by an efficient truss. In a patient fit for operative treatment, the radical cure should be suggested.

TRAUMA AND NEOPLASMS.

Trauma and Neoplasms.

It is my firm belief that trauma is never a causative factor in the production of a neoplasm. Although it is quite definitely established that constant irritation of a part can produce a carcinoma, there is no case recorded, so far as I can discover, in which the single application of a blow or wound has been the sole etiological feature of this new growth.

The old idea that cancer of breast had its beginning, in about ten per cent. of cases, in a blow is now practically discounted, and it is accepted that the relationship was established after the effect. A cancer of breast, developed and diagnosed, suggested to the patient the necessity for a cause, and she, casting her mind back, in many cases could recall the pain of a blow on that exquisitely tender organ.

Kelly[70] states that there is no doubt that injuries to the cervix uteri during labour are a definite etiological factor in subsequent cervical carcinoma. They may be, in that, they are the etiological factor in a leucorrhoea, which, during many subsequent years, goads to activity the very battle front of carcinoma, the juncture of two antagonistic mucous surfaces. This, however, is a very remote relationship, and is avoidable in most cases by careful repair. The late onset of the condition, despite the frequency of lacerations in very young women, and its occasional appearance in virgins do/

do not incline me to accept the injury as more than very faintly etiological.

The most constant relationship between malignant growths and injury is found in cases of fracture and sarcoma of bone. This has from time to time been alleged to have followed a few weeks after an injury, but I view the sarcoma in these cases as having probably been the precursor of the fracture.

In this group I would like to consider hydatidiform mole and chorion epithelioma. This inclusion is due to some extent to my view that hydatidiform mole, associated as it is with pointless proliferation of cells, out of normal relationship to surrounding tissue, and with definite power for invading tissues, must be considered as a new growth with potentially malignant powers. The reference by Glaister to Jacob's case[71], in which a hydatidiform mole was said to have been passed by a virgin, stimulates my interest.

This type of mole, and the chorion epithelioma which so frequently follows, are abnormal lines of development of foetal cells. I therefore cannot possibly accept Jacob's case as authentic for I take up the position, no pregnancy - no mole - no chorion epithelioma[x][72]. That a tumour of foetal elements/

[x] Taylor in "Principles and Practice of Med. Ju." 1910, Vol. II, p. 70, states "Vesicular mole ... is complete "proof of conception for it arises in no other way".

elements should result from trauma applied to a mother, when a tumour of maternal elements cannot be associated with trauma, demands a greater trust and credulity than I can offer to the theorists who would defend such a possibility.

What holds for malignant growths, is good for benign neoplasms, so we can assert that the uterine fibroid, the labial lipoma, the ovarian cyst, and other growths of Gynaecological interest are never the result of injury.

That injury may very adversely influence such tumours is, however, too true, and in the presence of such a traumatic aggravation of a tumour as torsion, necrosis, infection or rupture, prognosis requires very serious and full consideration.

Knocker records a case of Carcinoma of Kidney in which the patient has a prospect of life for some months. His exposure to trauma, of a slight degree, precipitated death by rupturing this already diseased organ. This case, an American one, had an insurance interest. The life policy of the individual did not cover accidents, and it was alleged by the insurance company that the death resulted from accident. This view the court upheld.

In one of my cases a cancer of cervix, stimulated by a severe fall, commenced to bleed. This was the first symptom of the presence of the disease which was/

was of course not caused by claimant's injuries.

Another case of mine on examination revealed a dermoid cyst of the ovary. In this case it was alleged that the cyst resulted from the fall. This was not accepted. A point of great interest in this particular example was a torsion of the pedicle through three complete twists. This torsion, very common in dermoids, may lead to necrosis with its symptoms. Had such a fate befallen this case the accident would doubtless have been blamed.

In cases of this nature the speculative lawyer, and his medical witnesses, find excellent scope for their infamous activities. They adopt the attitude that their client may have suffered for years from the condition described, but that her injury, no matter how trivial, so reduced her physically, that her resistance was lowered, and a condition, sufferable for years, had become unbearable, to her permanent detriment.

To refute such an allegation is difficult in all cases, and to disprove it to a sympathetic jury, containing women, is well nigh impossible. It is in such circumstances that one of the big fallacies of the jury system is demonstrated. These cases should be heard by a medical assessor, who would weigh all the evidence, and advise the judge as to the effect of the injury and the appropriate amount of damages due on the medical issue. To submit such questions to a jury of honest tradespeople is to ask too much of them, and leaves/

leaves a chance for gross error in assessment of damages.

TRAUMA AND TUBAL PATHOLOGY.

Trauma and Tubal Pathology.

The fallopian tubes, on account of their well protected position, are, when normal, very seldom involved by trauma. At the same time they may be injured, as illustrated by the case of Stark[73] in which was discovered a torsion of a perfectly normal tube with resultant haematosalpinx, while Ellsworth and Freeman record a case of tubal laceration due to indirect violence sustained by vaulting a fence[74].

That a salpingitis should follow exposure to trauma must be most infrequent, and can only result from extension of an infection from a wound, such as a vulvar or vaginal laceration.

Recurrence of a latent salpingitis, must, however, be accepted as possible, while the rupture of a sactosalpinx may undoubtedly occur.

In this latter type of involvement the most interesting group is that of ectopic gestation. Extra uterine pregnancy cannot, of course, arise from injury, but even slight trauma may precipitate tubal rupture or abortion. The established fact that some extra uterine gestations die, and that absorption later takes place[75], despite the generally adopted view that diagnosis of such a condition, early or late, indicates early laparotomy, leaves the claimant sound grounds for alleging aggravation of the condition. I adopt the view that operation in all these cases is essential, and/

and that an injury but precipitates the operative interference. Berkeley and Bonney[76] quote a case of this type wherein rupture, followed by a long illness from pelvic haematocele, was said to follow the patient's having tripped over a carpet. They refer to the death of the ovum with subsequent absorption as being so extremely rare, that to anticipate it, and withhold operation would be to court disaster, and submit, in a pawky way which might not be accepted in a court of law, that the rupture, as precipitated by the accident, may save the claimant such more serious sequelae as abdominal or broad ligament pregnancy.

It is safe to state that without any accident such ectopic gestations either abort or rupture with very serious, often fatal, results, and that the trauma, in all of these cases, must be considered as a factor which may precipitate these crises but does not make the prognosis less favourable. Should a medico-legal examination reveal an unruptured tubal pregnancy, it is obviously the duty of the examiner to make those responsible for the patient's care conversant with the findings.

The fact that tubes, the seat of inflammatory reaction, frequently have formed pelvic adhesions makes traumatic torsion in infected cases improbable, but occasionally I have seen a markedly enlarged hydrosalpinx, freely movable and without a single anchoring adhesion. Twisting of these, with the broad ligament/

ligament as a pedicle, may quite possibly result from a fall.

Whenever chronic tubal pathology is discovered in examining a claimant, the condition should be fully recorded. An acute recrudescence may develop at any time, the vaginal examination may stimulate it, with resultant allegations of traumatic causation. When a tubal infection is stimulated to activity by trauma, the condition should make itself manifest soon after the accident. The time element is of great import in these cases.

It is perfectly safe to say that if, by the expiry of a week from the time of the alleged injury, there has been no suggestion of the recurrence of acute symptoms, any such exacerbation developing later is due to the ordinary course of events, and is a thing apart from the injury.

Ability for work after tubal involvement is very variable.

In a case where a normal tube had undergone torsion its removal by operation would be practised and the patient would, other things being equal, be fit for duty eight weeks from the operation. The same holds for an uncomplicated extra uterine gestation. In the first case there should be no permanent disablement, but post-operative adhesions may follow operations on the pregnant tube, causing permanent pelvic discomfort.

The/

The definite prognosis in salpingitis as to when a patient can resume work is beyond human capability. The outcome of tubal infection varies from complete recovery of the parts, to permanent invalidism. Even in cases, definitely chronic, where it is decided to perform the optimum operation for the particular degree of pathology, good results cannot be guaranteed. Occasionally, such operative interference may give no results at all, generally they produce alleviation of the symptoms, and not infrequently a complete cure.

TRAUMA AND OVARIAN PATHOLOGY.

Trauma and Ovarian Conditions.

The normal ovary may, despite its apparently well guarded site on the posterior surface of the broad ligament, suffer changes as the result of externally applied trauma.

Frequently one finds ovarian haematomata, either in an already formed space such as a follicle or corpus luteum, or in the ovarian substance itself. Munro Kerr[77] and Frank[78] describe such findings. Often enough these haemorrhages are found with attendant pathological conditions but frequently they form the sole pathology. I am satisfied that violence may play a part in their production, and find that in this I follow the view of Haig Ferguson[79], that a cough, lifting heavy weights, or handling during operation, may be considered directly causative.

Bearing in mind the extreme vascularity of the ovary, and the further fact that, not infrequently, the vessels adjacent to that organ are to a degree varicose, and aligning with these facts our knowledge of ovarian anatomy and physiology, let us ask ourselves what part injury to the normal ovary may play in the production of those irregular menstrual periods which are seen, with comparative frequency, after an injury.

Kerr/

Kerr and Haig Ferguson[80] accept the Graafian follicle as rupturing sometimes between the seventh and fourteenth day prior to the onset of the menstrual period. Schieller of the Kermeuner Clinique in Vienna expresses the view that, normally, rupture occurs on the eleventh day from the beginning of the menstrual cycle. Frankl[81] of Vienna is less dogmatic in dates but very definite on principles. He expressed them thus:-

While a corpus luteum persists, no menstruation can occur and no follicles develop.

When the corpus luteum degenerates menses commence.

When a corpus luteum is removed the flow starts.

Can these principles, that cyclic time table, and our anatomy and physiology, be deranged by trauma to such an extent as to produce pathological ovarian changes and clinical manifestations?

Cohn[82] and Urban[83] state that a corpus luteum may rupture leading to peri-ovarian or pelvic haematocele. Rokitensky[84] and Cristalli[85] describe pouting haemorrhoid like Corpora lutea, showing through the ruptured follicle,, while Luppoff[86] reports prolapse or extrusion of the yellow body, which may be only hanging from a fine stalk or free in the Pouch of Douglas.

Frankl/

Frankl[87] described to me two processes by which the corpus luteum might be involved by haemorrhage. The first, a bleeding into its cavity damaging it and permitting free blood to escape into the abdomen, and, secondly, haemorrhage into the ovarian stroma at the base of a corpus luteum, by which that structure became everted, or even pedunculated, upon the ovarian surface. Occasionally it was completely cast off.

The pathological sequence after such haemorrhages is the premature death of the corpus luteum, and, with its death, menstruation would occur. This is a physiological explanation of the type of case where an injury is followed within hours, or one or two days, by a menstrual period, and I must confess a preference for the physiological rather than the psycological in medicine.

Now, if all these cases showed this reaction within a few days of the application of trauma, the history would be complete; but this is not true in all cases. Some may go from ten to fifteen days before the irregular haemorrhage appears. Such cases are those in which there is no corpus luteum to injure, but where its precursor, the Graafian follicle is maturing for rupture. Should such follicle rupture be produced prematurely by trauma, what fate might befall its embryo corpus luteum?

It/

It might develop as after physiological rupture, reach maturity at an earlier period than usual, and produce premature menstruation; it might, having been born of a prematurely ruptured and possibly considerably damaged follicle,, have a shorter active cycle than usual, with an even earlier appearance of uterine bleeding; or it might not develop at all, in which event the uterine haemorrhage would be expected very soon after the injury.

My cases, unfortunately too few to permit me dogmatising, as far as they go, substantiate this theory. I have tabulated them hereunder.

GROUP I.

The time between the beginning of the menstrual period and the trauma is such as to ensure the presence of an active corpus luteum.

Case No.	Interval, in days, between last day of period and injury.	Interval, in days, between injury and onset of haemorrhage.	Duration of bleeding.
C.I.	I4.	0.	IO.
C.2.	I20.	0.	9.
C.3.	I4.	I.	3.
C.4.	I6.	I.	2.
C.5.	I5.	2.	4.
C.6.	22.	2.	IO.
C.7.	22.	3.	7.

GROUP II.

The time between the beginning of the menstrual cycle and the trauma is such as to ensure the absence of a corpus luteum.

Case No.	Interval, in days, between last day of period and injury.	Interval, in days, between injury and onset of haemorrhage.	Duration of bleeding.
C.8.	7.	2.	6.
C.9.	2.	2.	IO.
C.IO.	3.	4.	I.
C.II.	7.	5.	I.
C.I2.	5.	IO.	3.
C.I3.	I.	I5.	7.
C.I4.	Period just begun, stopped third day.	7. Resumed seventh day.	3.

GROUP III.

C.I5. The menstrual period was due on the day on which the injury was sustained. The trauma delayed the flow till seven days thereafter.

C.I6. The menstrual period had just begun when the injury was sustained. The flow was immediately stopped, and there was a subsequent amenorrhoea lasting six weeks. Thereafter, the menstrual cycle was altered.

In Group I, which contains seven cases where an active corpus luteum is presumably present, there are two cases in which haemorrhage occurred within a few hours of the accident, and other two where its advent was within twenty four hours. In only one case was the metrorrhagia withheld till the third day. Its average appearance was 1·28 days after the trauma. Cases 1 to 4 of this group I would consider as having followed complete destruction of corpus luteum, cases 5 to 7 as following on partial destruction, with early degeneration.

In Group II are seven cases where presumably there is no active corpus luteum. Here we find no haemorrhages within twenty four hours of the injury, and two only show it within forty eight hours, while the remaining five all have a greater interval between trauma and metrorrhagia than any in Group I. One actually has an hiatus between trauma and haemorrhage of fifteen days. In this group the average appearance of the bleeding was 6·43 days after the injury.

The cases C8 and C9 could be explained by complete destruction of the ripening follicle and its embryo corpus luteum; cases C10, C11 and C14 might represent an effort on the part of a damaged follicle to form a corpus luteum with very short activity; while C12 and C13 suggest that the follicle has ruptured with little damage to its structure, and that the corpus luteum has developed fully.

The/

The cases which I have placed in Group III are exceptional.

In the first instance, C15, a period, just due, was delayed seven days by trauma. I cannot imagine a corpus luteum on the verge of retrogression taking a new lease of life as the result of an injury, but I can imagine a follicle rupturing, and an attempt at fresh lutenization delaying the period for some days.

Case C16 is the most peculiar of this class I have experienced. I accept the control of the period just commenced as resulting from fresh lutein actively following follicle rupture, but I quite candidly cannot explain the subsequent six weeks amenorrhoea, nor the alteration in menstrual cycle following it.

In most of these cases the single irregular bleeding is the only departure from normal, and by the termination of the injured party's usual interval a period of her particular duration follows. Bleedings of this nature, per se, constitute no greater disablement than a menstrual period.

Oophoritis, like salpingitis, is never a primarily traumatic condition, and can only result from the extension of an infection. All that has been said of salpingitis, its relation to trauma, and its prognosis, may be equally applied to this condition, which almost invariably accompanies it.

Retention Cysts. If a salpingo-oophoritis can be associated with an infection, vulvar, vaginal, uterine or appendicular, then the possibility of the production of retention cysts, secondary to the thickening of the ovarian surface, must be conceded.

Ovarian Neoplasms. Unilocular or multilocular ovarian cystomata, dermoids and carcinomata are new growths unassociated with injury, but the application of force may so involve one of these neoplasms as dangerously to impair the individual or even produce fatal results.

These changes produced by trauma include:-

Torsion. A fall may produce torsion of the pedicle of a cyst with the consequent acute disturbances which call for operative interference. This condition is less common in the solid ovarian growths.

Necrosis. This may result from direct trauma or be secondary to torsion.

Infection. With the exception of those cases where a penetrating wound actually involves the cyst, this condition can seldom be of traumatic origin.

Rupture. Direct violence or a fall can produce this.

Ovarian Pregnancy. The views expressed while considering tubal gestation apply fully to this condition.

TRAUMA IN RELATION TO PROLAPSE.

Trauma in Relation to Prolapse.

In approaching this division of our subject, a section open to controversy, it is as well to classify the various pathological conditions which may be described under the heading prolapse, and to consider each separately. The classification I would use includes uterine retro-displacements, which must be considered, in many cases, as the inception of descent of the uterus. The grouping is as follows:-

1. Retroflexion of uterus.
2. Retroversion of uterus.
3. Hypertrophy of cervix.
4. Prolapse of anterior vaginal wall, or cystocele.
5. Prolapse of posterior vaginal wall or rectocele.
6. Descent of uterus.

Retroflexion of Uterus. This condition, one very occasionally congenital, and as a rule acquired in an uterus during the puerperium, leads to the actual formation of a bending backwards of that organ, near the level of the internal os. I can conceive of the production of such a condition as the result of a strain or fall during the first few weeks after a labour, while the organ is still pliable, and is not completely involuted, more particularly in the presence of a distended bladder; but that it can be produced/

duced as the immediate result of injury, when the uterus is in the normal non-gravid state, I am not prepared to accept, despite the views expressed by authorities[88, 89]. That such a state may gradually develop in a uterus long retroverted may be possible.

I cannot appreciate the mechanism by which an acute retroflexion could be produced in the non-gravid uterus, an organ of very considerable muscular strength, resistant to a degree and, at the same time, one having a fair amount of mobility.

Stevens[90] does not even mention retroflexion in his contribution to the literature, and even in his remarks relative to retroversion, he indicates the difficulty of establishing the possibility of such a condition following upon an accident, and points out that no case has been brought to his notice, in which it could be definitely established that a backward displacement was due to an accident. The fallacies in connection with these displacements are so many that they always afford argument against the woman's story. He enumerates these fallacies thus:-

"1. The womb may be so movable that one day it is in a "normal position and another day displaced. This "may be used as an argument even against the very "existence of a displacement.

"2. Any woman who has had a child or a miscarriage, "may acquire a backward displacement which gives no "symptoms./

"symptoms.

"3. Such symptomless displacements may cause symptoms "sooner or later, as the result of congestion of "the womb.

"4. A single woman may have a backward displacement "which is usually congenital, and discovered by "chance during the course of her examination by a "medical man. It may cause no symptoms.

"5. A single woman with a congenital displacement may "acquire symptoms as the result of infection or "congestion of the womb.

"6. It is said that a single woman may acquire a back-"ward displacement from long standing over-filling "of the bladder".

It is noteworthy that these fallacies described by Stevens, and the doubt he casts on the whole theory of traumatic production in these cases, is aimed not at retroflexion, which he does not even mention, but at retroversion of the uterus, the next heading we are to consider.

<u>Retroversion of Uterus</u>. In this condition the whole uterus is turned backwards on its axis. The fundus uteri lies in the Pouch of Douglas, while the cervix is tipped up anteriorly until it points forward towards the vaginal introitus or anterior vaginal wall. The frequency of this condition is so great in my Dispensary practice - practically twenty per cent. of all cases are so involved - that one has, very serious-ly,/

ly, to consider all the factors which Stevens enumerates, and in making the examination, must, as far as possible, decide from the degree of retroversion and the condition of the uterus, the possibility of trauma being actually a productive factor. That injury can produce a retroversion is now beyond argument.

A specialist colleague[91], permits me to quote an instance in which a patient was knocked down, falling forcibly on her buttocks. He saw her within a short time of her accident, and, it is noteworthy, that she suffered acute symptoms, following on her fall.

One of my own cases is an undoubted example of this type of production. This patient, Mrs. S., aged 21 years, was looking into a shop window, on the 21st of December 1923, when the paving under her feet gave way. As she was precipitated feet first towards the cellar in front of the shop, her descent was suddenly stopped by her buttock becoming impacted in the hole through which she was falling. With some difficulty she was removed from this awkward position and taken home. In addition to general injuries, she complained that, two days after her accident, she commenced to bleed per vaginam, and that this bleeding had continued, in gradually lessening degrees, for thirty five days. From the time of the accident, and continuing throughout the haemorrhage, she had a considerable/

siderable amount of pelvic pain, which had been slowly diminishing up to the time of examination. Her obstetric history had been a satisfactory one, her pregnancies having been three in number, each perfectly normal. Her monthly illnesses, which had always been regular and of fair loss, were of the five day, recurring every twenty eight type. There was no intra-menstrual discharge of any kind. Until the fall she had never suffered any irregularity, nor had she had the slightest complaint. Her medical advisor, a man well known to me, was able fully to confirm this history.

On examining this patient, I found the uterus lying in retroversion. It was slightly larger than the normal organ, a condition which may quite readily be explained by the congestion attendant on this acute backward displacement having been left for nearly six weeks without efforts at re-position. It is quite possible that a degree of sub-involution, plus a distention of bladder, made this uterus more liable to traumatic retroversion than in the ordinary case. The fact remains there was no retroversion until the fall. This woman's last pregnancy had been eight years prior to the accident, and during that time she had not had any symptoms. It is true, as Stevens says, that symptomless displacements may cause symptoms sooner or later, as the result of infection or congestion of the womb, but these symptoms enumerated by him,/

him, are backache, bearing down pains, a white discharge and a disturbance of the monthly periods. In this case there is no suggestion of infection, and the symptoms are different altogether from those of a chronic retroversion. They consist of considerable pelvic discomfort, with prolonged haemorrhage, symptoms which one would associate with production by suddenly applied trauma. A colleague describes a case in which he had removed a polypus from a patient, and had noted the otherwise normal condition of the pelvic organs. Two years later, no pregnancy having intervened, this woman was hit in the back by a motor cycle. She developed vaginal haemorrhage on the following day. This bleeding, attended by severe pelvic pain lasted three weeks. Examination then revealed a retroverted uterus.[92]

Stevens proceeds very fully to a differential diagnosis between traumatic retroversion, and retroversion produced congenitally and otherwise. He indicates the necessity for noting the size and consistence of the displaced organ, laying special strain upon the fact that a big congested uterus cannot immediately follow any injury, as it necessitates changes in the whole uterine structure, due to congestion lasting for some considerable time; and he suggests that the traumatic retroverted uterus, discovered soon after an accident, should not be the seat of such congestion and hyperplasia. Theoretically this/

this may be true in many cases, but one must always remember that there is nothing to prevent an ante-flexed uterus being hyperplastic, and that, in fact, such an uterus would be more liable to retrovert in the presence of a sudden strain or fall. To my mind the only helpful point in the examination is to be found in those cases where the retroversion is congenital. There one finds, as a rule, a small under-developed uterus, retroverted and retroflexed, a short posterior vaginal wall and, generally, scanty painful periods, in contrast to the excessive periods of the pathological retroversion. One point of differentiation, however, apart from the congenital type, may be found.

Hypertrophy of cervix, with a retroversion, quite definitely indicates that the condition is one of long standing, and not one produced accidentally, even if the examination be delayed for many weeks after the accident, while the same may be said in these cases where the retroverted uterus is fixed by adhesions.

Hypertrophy of Cervix. Hypertrophy of cervix, or elongation of the cervical portion of the uterus, either vaginal or supra-vaginal, is a chronic condition which takes considerable time to produce. That an accident could be the primary exciting cause in this pathological change, is out of the question.

Cystocele/

<u>Cystocele</u>. Cystocele or the descent and protrusion of the anterior vaginal wall with the bladder, is a condition which, as a rule, results from the stretching of the anterior wall during the process of childbirth. The muscular supporting fibres are stretched to such a degree, that they cannot completely recover, and the weakened wall, more particularly in the presence of perineal laceration, tends to bulge with each effort at emptying the bladder. Occasionally, although very rarely, cystocele may develop in women who have not borne children, but these women as a rule are of poor physique, badly nourished, and over worked. A cystocele alone cannot be produced by the application of force. It is a condition which takes a long time to develop, and when developed to any degree, the thickening and hardening of the mucous membranes give the examiner a very good idea as to its being of long standing.

One of my cases, Mrs. McI., a woman of 59 years, complained that, following on a fall downstairs, she had had difficulty in retaining her urine, which was passed on coughing or on the slightest exertion. She further expressed worry regarding a bleeding from her bowel. I saw her about five weeks after her accident, and discovered that she was an extremely stout lady of 59 years. She showed no signs whatever of the various bodily injuries which she garrulously described. Examination of the genitalia, however/

however, revealed the presence of a large thick walled cystocele, obviously one of very long standing. The skin of the thighs was involved in a chronic erythema, due to the irritation following her incontinence of urine, while the bleeding of which she complained, had its origin in obvious and extensive haemorrhoids. This example was obviously an effort on the part of this individual to obtain damages for injury on the score of a series of conditions all of long standing.

Rectocele. The prolapse of the posterior wall with no other degree of prolapse, is uncommon, and in the absence of perineal laceration as an etiological factor to all intents and purposes unknown. It is my opinion that, unless trauma should tear the levatores ani, that rectocele, per se, never follows injury.

Descent of Uterus. Prolapse of uterus produced traumatically is so extremely rare, that one might almost say that it never resulted from accident. There are, however, a few exceptional cases, exceptions so outstanding as to be accepted as proving the rule. The uterus is maintained in its position principally by the para-cervical tissue, and unless this tissue be injured by direct tearing, by the stretching of childbirth or by extreme debility, it is impossible to have a true descent of uterus.

We can therefore definitely assert that in the presence of normal supports to the uterus, injury cannot produce prolapse, unless the violence actually tears the para-cervical/

para-cervical tissue. An injury of such an extreme nature, as can be readily understood, is very exceptional.

An interesting case of traumatic prolapse in a virgin is described[93]. In this case the injury was of a type which would fit in with the proviso I have made above. The patient fell, feet first, from a hay-stack to the ground, and immediately thereafter felt severe abdominal pain and discomfort, a mass protruding from the vagina. A fall of this nature would tear the para-cervical tissue, and the force expended could quite easily produce the condition described. When one recalls the fact that debilitated nulliparus women may develop prolapse, one must grant that the traumatic production of such a state of affairs would be more liable to follow in cases of debility and wasting.

The vast majority of these prolapse cases, however, are of slow production. They are unattended by any symptoms which might be described as acute, except in the late stages, when bladder infections may become troublesome. All prolapse of uterus should be considered a thing apart from trauma, except in the presence of extremely severe injury with the development of the acute symptoms which are bound to follow injury to the para-cervical tissue, and in the absence of any of the stigmata of chronic prolapse, such as thickening of a cystocele or rectocele or hypertrophy of cervix.

TRAUMA IN MISCELLANEOUS OBSTETRIC AND GYNAECOLOGICAL CONDITIONS.

Trauma and Miscellaneous Obstetric and Gynaecological Conditions.

Haemorrhages of Pregnancy not already discussed.

Placenta Praevia. The unavoidable haemorrhage attendant on the separation of a placenta situated, partially or wholly, in the lower uterine segment, cannot result from injury. In these cases trauma may, however, stimulate uterine activity and the initial bleeding may appear in close time relationship to a fall or blow. Placenta Praevia not infrequently causes premature labour, still-birth, malpresentations, serious puerperal conditions or maternal death and, as the responsibility for such unfortunate sequelae may be attributed to accident, these cases call for very particular examination and a detailed report in which the generally unsatisfactory outcome, even in the absence of injury, should be emphasised.

Inertia Uteri with Retained Placenta or Haemorrhage in the Third Stage of Labour.

These conditions may follow injury where the force has produced premature rupture of membranes with a prolonged dry labour, or where by previous injury the lumen of the birth canal has been so reduced as to cause undue delay in the second stage of labour. A vaginal or cervical stenosis following sloughing, or excessive callous formation resulting from fracture of pelvis would be causative.

Adherent/

Adherent Placenta with Haemorrhage in the Third Stage of Labour.

The greater frequency of this condition in cases of premature labour affords very sound grounds for establishing a traumatic relationship in cases where, following an injury, the uterine contents have been prematurely expelled.

Precipitate Labour and Inversion of Uterus.

A woman, in labour, falling from a height on to her feet might suffer a precipitate delivery and, given a fundal attachment of placenta, there is a possibility of the production of an acute inversion of uterus.

Hydatidiform Mole, Ectopic Gestation and Rupture of Uterus have been considered earlier, while a Threatened Abortion in a Retroverted Uterus differs in no way from these conditions as described in their respective sections.

Sepsis and Trauma.

Puerperal Sepsis is dependent on the presence of micro-organic life in the maternal organism. Trauma cannot cause this, but a puerperal woman may have an infected traumatic lesion as the focus from which a general sepsis originates. Again, injury, by interfering with a pregnancy - let us take for example the case of traumatic abortion which leaves an exsanguinated patient - may so debilitate a woman as to render her less resistant to the invasion of infective cocci./

cocci.

A case of my own, later recorded, in which bilateral phlegmasia alba dolens was alleged to have been produced as the result of hearing a gas explosion, suggests to me the desirability of mentioning here the non-septic type of this condition. Inactivity, confinement to bed, and poor general condition, can be etiological in the production of simple thrombo phlebitis. Recently, in an injured workman, I have seen an extreme example of this. The condition can be found in women and, in the puerperal case, the etiology must be fully investigated before this simple form which, of course, may be associated with injury, can be eliminated.

Fracture of Pelvis.

While this subject is fully treated in surgical literature it has, as Berkeley and Bonney indicate[94], a special application in the female. Such pelvic fractures, they assert, though they do not offer any explanation, are frequently followed by sterility.

Their major importance is found in the end result of the injury. Such pelvic injuries may leave a birth canal so distorted as to render subsequent delivery a matter of extreme difficulty, and might even prove an indication for Caesarean Section. They advocate X-Rays in all of these cases, but the plates, except in the most blatant cases, are valueless in an estimation/

estimation of the difficulties offered at succeeding labours. The only real test in many of these cases is the estimation of foetal head and pelvic brim in the last month of pregnancy.

In this respect it is perhaps worthy of note that deliberate fracture of pelvis is suggested by one outstanding obstetrician[95], as a line of cure in cases of contracted pelvis. In favourable examples traumatic fracture might produce this fortunate result.

<u>Contracted Pelvis</u>.

The importance of pelvic deformity in civil cases is that its effect on labour may later be attributed to an injury during pregnancy. Earlier I have mentioned an instance of a simple third vertex position in a normal pelvis being associated with an injury sustained at seven months. In that case the allegation continued that, "as the result of said "accident, pursuer's labour was unduly prolonged and "painful". It is as well then always to note, when examining an alleged obstetric disablement, the condition of the pelvis, and so be in a position to explain any complication of the subsequent labour.

<u>Malpresentations</u>. While it is feasible that a fall may alter the position of the child in utero, I am satisfied that such traumatic alteration is very exceptional. The fact that a child in utero may, spontaneously, alter position in late pregnancy or even after labour has begun, is accepted. Again the comparative/

comparative simplicity of correcting malpresentations prior to labour should not be overlooked in such cases.

Hydramnios. So far as our present knowledge goes, hydramnios cannot follow the application of force. It has sequelae which might be attributed to injury - premature labour, malpresentations, foetal deformities, atonic haemorrhage, etc. - and so calls for very full consideration in the medical report.

Traumatic Amenorrhoea.

By sub-conscious mental control, fear or hope being the usual stimulants, menses may be suppressed, and the condition of pseudocyesis produced. Trauma, however, seldom produces prolonged absence of menses. Kelly[96] states that a menstrual period may be delayed or missed as the result of shock or sudden fright, but I have failed to find examples of this amenorrhoea lasting longer than one period. I have only two cases in my experience illustrating this condition. In the first a period, just due at the time of the injury, was delayed seven days, while the second example, menstruating when the trauma was applied, stopped abruptly, and had amenorrhoea lasting six weeks.

One of the most interesting cases in the literature is described by Hendry[97]. Here the amenorrhoea was persistent, and was attended by typical dystrophia adiposo-genitalis. The pathology in/

in this case was a fracture of sella turcica, with pressure on the pituitary gland.

Appendicitis and Trauma.

The relationship of trauma to appendicitis is well established[98, 99]. It is dealt with in the general literature, but of special importance in the female is the genital involvement which may follow. A pelvic peritonitis, salpingitis or oophoritis may ensue, causing prolonged disablement, and possibly permanent invalidism, with dysmenorrhoea, menorrhagia and sterility which later call for operative interference.

Vaginal Injuries following Trauma.

The vagina may be wounded, and the various fistulae found communicating with the canal may form, as the result of the accidental penetration by pointed instruments. A less common class of injury, but one much more interesting, is the rupture of vagina which may follow indirect violence. Berkeley and Bonney[100] explain that cases of vaginal rupture are recorded as the result of violent physical shock, but that in all of them the patients had previously suffered from prolapse. They must have overlooked cases, quoted by Garrigues[101] and Frank[102], in the first of which the vaginal mucosa was ruptured when the patient fell, hitting her abdominal wall on the edge of a step of a stair, while the second case demonstrated indirect rupture of the posterior fornix with prolapse of intestine/

intestine into the vagina.

The duration of disablement may, in such cases, be considerable and, in the extreme examples of fistula, a severe permanent disability is occasionally produced.

Traumatic Urinary Disturbances.

Frequency of Micturition. Following injury I have experienced several instances of this complaint. In most of them there was a degree of cystocele or urethral dilitation present to explain, in part, this manifestation. The condition is, in the main, of nervous origin, is found in women at or over the menopause, and generally clears up rapidly with the passing of other nervous symptoms. It may also be found in traumatic fissure or atresia of urethra in which event dysuria is also present.

Retention of Urine. After vulvar injury the urine may be retained temporarily by local oedema, but the more common type of retention is the neurotic type, similar to that found after perineal repair, and reacting as readily to medical treatment.

Sterility. Sterility may follow any injury which produces complete atresia of vagina, cervix or tubes. Hendry's case of dystrophia adiposo-genitalis is an extreme and very unusual example of traumatic sterility[97].

Uterine/

Uterine Fibroids. In the chapter dealing with neoplasms these growths have been considered. Degeneration of them may follow an injury, and precipitate operative interference. Berkeley and Bonney[103] remind us that some medical men still advise leaving these growths alone and employing medical treatment, while others advocate X-Rays in preference to operation. This divergence of opinion permits a claimant, under circumstances such as I have indicated above, to allege, with a degree of justification, that an injury had precipitated operation and its attendant risks. It would, however, act as a palliative to a jury to produce claimant after a successful operation explaining that, apart from her having any disablement, she was in better health than before her injury.

Puberty, the Menopause and Neurosis.

In the course of the routine examination of the nervous system which should be made in all accident cases, one finds a high percentage of women with a degree of nervous disturbance not far short of true traumatic neurasthenia. This nervous instability is more marked during pregnancy or during the big changes in a woman's life, puberty and the menopause.

Trauma, superimposed on the climacteric, can produce very distressing nervous symptoms and in some of these cases, as in a few of the pregnant ones, the possibility of long standing neurasthenia, or even menopausal or puerperal insanity, should not be overlooked.

APPENDIX OF CASES.

G R O U P   A (1).

INJURIES UP TO THE THIRD MONTH WITH NO INTERRUPTION OF THE PREGNANCY.

Injury at Three Months - No Involvement.

Pain due to Haemorrhoids and Constipation.

A (1) 1. Mrs. L., aet. 26 years, on 24/10/20, tripped on a foot pavement, sustaining a bruise of the fore-head and general strain. At the time of examination, seven weeks after her accident, her obstetric com-plaint included the allegation that she had suffered abdominal and rectal pain following the fall, and per-sisting; and fear of her pregnancy being involved, was expressed. Her menstruation was of the 3-4/28 regular, painless type, accompanied by average loss, the last period occurring late in the previous August.

She had previously two normal pregnancies.

Vaginal Examination.

Vagina. Soft and pigmented.

Cervix. Soft and lacerated, no dilitation. /sa?

Uterus. Enlarged, just palpable abdominally, size of four months' gestation, neither tense nor tender.

Quickening. Claimant had felt suggestions of movement. Foetal heart sounds and ballottement were not appreciated.

The absence of an history of internal haemorrhage and the non-rigid non-tender uterus contra-indicated any placental separation.

The/

The size of the uterus corresponded with the menstrual dates, but one could not omit the possibility of claimant having menstruated one month after she became pregnant, with the possibility of her condition being that of a missed abortion.

This was to some extent ruled out by claimant thinking she felt "little flutterings".

While all the findings in this first examination suggested that the pregnancy was uninvolved, there was not a single positive sign of pregnancy, far less a definite sign of foetal life. For legal purposes it was desirable to wait for six weeks and re-examine. This was done and the tentative opinion that the pregnancy was uninvolved was confirmed by the appreciation of uterine growth and palpable foetal movements.

Claimant's abdominal pain was left sided, over the sigmoid, and resulted from constipation, while her rectal pain was explained by the presence of haemorrhoids.

In this case there was nothing apart from the injury to explain a miscarriage had such taken place.

Injury at Three Months: No Involvement.

A (1) 2. Mrs. M., aet. 33 years, on 13/3/23 tripped on a defective foot pavement, sustaining injuries to her left side, left ankle and right knee. When examined ten weeks later, claimant's remaining complaint was one of fear that her pregnancy might be involved. Her menstruation was of the 7/28 regular, painless type, accompanied by great loss, the last period occurring about the middle of the previous November.

Her previous pregnancies were as follows:-

1-4 Normal.
5 Premature labour with haemorrhage.
6 Four and a half months' miscarriage.
7-8 Normal.

The abdomen had enlarged progressively.

The uterine consistence was normal, the ovoid reaching to the level of the navel.

Movement was said to be appreciated.

There was a minor degree of contraction of the pelvis; the true conjugate measured three and three quarter inches.

A repeated vaginal examination clearly revealed that the pregnancy was progressing normally. The urine was normal, and serological examination was refused, so I could find nothing but her multiparity whereby her two interrupted pregnancies could be explained.

The/

The fact that claimant's previous full time labours were normal gave no hint to the presence of pelvic contraction in this case, but this point was noteworthy. This child, her ninth, might have developed to such size as to make the contraction apparent by a difficult labour, and allegations relating this to the injury might later have been made.

The opinion was expressed that there was no remaining disablement, and that any obstetric complication which might later become apparent would be a thing apart from the accident.

Injury at Three Months: No Involvement.

A (1) 3. Mrs. R., aet. 20 years, on 8/5/23 tripped in a foot pavement, sustaining injuries to the left side, which became discoloured and painful. At the time of examination, three weeks after her accident, her obstetric complaint was that of worry regarding the effect of her injury on her then pregnancy. Her menstruation was of the 6/28 regular, painful type, with great loss, her last period occurring on 9/2/23.

She had had one previous pregnancy.

Vaginal examination revealed the fact that the uterus was enlarged, correspondingly with claimant's dates, and normal in consistence.

No dilatation of os uteri.

No bleeding since injury.

No albuminuria.

No movements or heart appreciable.

A second examination was made and the normal progress confirmed.

Injury in First Three Months: No Involvement.

Inflamed Sebaceous Glands.

A (1) 4. Mrs. A. McK., aet. 24 years, on 5/9/24 tripped on a defective piece of paving and fell, injuring her left arm and both ankles.

When examined three weeks later it was discovered that she was six to eight weeks pregnant. There was no involvement of this gestation. At that time her complaint was of a painful swelling at the foot of her spine. This condition developed ten days after her accident, and was alleged to result from it. There were in the skin over the upper part of the sacrum a series of inflamed sebaceous glands. These were the cause of her complaint.

Exposure to Gas Explosion: Severe Trauma: No Involvement.

A (1) 5. Mrs. J. L., aet. 24 years. On 23/10/24 a gas explosion occurred in the room in which she was residing, causing her to be thrown across the room, and thereby producing discolouration of both eyes, bleeding of her nose, and bruising to the chest over the lower part of the breast bone.

Examined some ten weeks later, patient's complaints consisted mainly of sickness, and a sensation of fluttering in the lower abdomen. She was further worried as to the effect of her injuries on her then pregnancy.

Relative to the pregnancy, the following points were of importance. This pregnancy was claimant's first. Her menstrual history was of the 2/28 regular type, her last period occurring probably some two weeks prior to the gas explosion. She was uncertain as to the actual date.

When I examined her, I discovered an uterus of normal consistence, occupying a normal position and of a size slightly larger than I would have expected for her period of amenorrhoea. There had been no history of bleeding or of uterine discomfort. As a second examination was refused I was unable to say definitely that the child was alive. I was, however, satisfied that her history being reliable the pregnancy had grown since the time of her accident. With/

With regard to claimant's complaint of sickness, this condition is extremely common in pregnant women, and was unrelated to her accident. There was an extreme degree of pelvic contraction present, and this condition was noted.

GROUP A (2).

INJURIES IN THE SECOND THREE MONTHS WITH NO INTERRUPTION OF THE PREGNANCY.

Injury at Three and a Half Months: No Involvement. Alleged Threatened Abortion.

A (2) 1. Mrs. M. S. or G., aet. 36 years, on 2/7/24 fell over a defective iron grating.

Examined one week and two days later, she complained of severe pain in her right side, and expressed fear for her then pregnancy.

When first seen on 11/7/24 the uterus was early pregnant. A re-examination 18/8/24 showed distinct enlargement. Between these examinations haemorrhage for two days was alleged. The pregnancy progressed normally.

Fall at Four Months: No Involvement.

A (2) 2. Mrs. R. F., aet. 38 years, was on 22/3/22 thrown to the floor of a tram car. As the result of this accident, the left lower region of her abdomen was severely bruised. When examined five weeks after her accident, she complained of severe pain in the left lower region of the abdomen, and fear as to the effect on her then pregnancy was expressed. Her menses were of the 4-5/28 type, the last period being on 29/10/21.

Her previous seven pregnancies were normal.

Findings:-

Uterus: Normal consistence, size of four months' gestation.

Movements: Quickening had been experienced, and foetal movement could readily be felt through the thin abdominal wall.

Patient was given to exaggerate and was extremely introspective. The pregnancy proceeded normally.

Fall at Four and a Half Months: No Involvement. Sciatica and Introspection.

A (2) 3. Mrs. E. S., aet. 30 years, on 9/7/23 fell from a tramway car and was "trailed the breadth of "the street". On 29/10/23, sixteen weeks later, she complained of severe "thuds and bumps" experienced in the abdomen, a shooting pain down the back of her left leg, (similar to one experienced during a previous pregnancy), occasional headaches and nervousness. Her menses were of the 4/28 type, the last period commencing at the end of February.

Of her two previous pregnancies one was normal and the other a forceps delivery.

The foetus was readily palpated, occupying a third vertex position, due, doubtless to her having a pendulous abdomen. Investigation revealed the fact that the thuds and bumps she felt were foetal movements, while the pain in the leg was due to sciatica. She was in a very highly strung condition which cleared up rapidly after the normal labour which followed.

Fall at Five Months: No Involvement. Old Appendix. Alleged Threatened Abortion.

A (2) 4. Mrs. J. B., aet. 25 years, on 28/9/23 tripped over a defective paving. In falling she injured her right arm and side. On examination four weeks after the accident, claimant complained of a pain along the right side of the abdomen and a dragging sensation in the small of her back. In addition, following half an hour's uterine bleeding ten days after the fall, she noted complete absence of any suggestion of foetal movements, as also absence of any enlargement of the womb. Her menses were of the 4-6/28 regular type, the last period being at the end of April.

She had had three normal pregnancies.

Uterine consistence and size were normal for her dates.

Quite definite foetal movements and heart were discovered.

The right sided pain was over the site of an old appendix operation scar.

There was nothing to support the history of uterine haemorrhage which I candidly did not accept.

Fall at Five Months: No Involvement.

A (2) 5. Mrs. F., aet. 36 years, on 16/3/22 tripped on a defective paving and fell, injuring her right leg and right side. Examined two weeks and four days after her accident, she complained of pain on the right side of the lower abdomen. She also was worried as to the effect on her then pregnancy. Her menses were of the 3-4/28 regular type, the last period being early in the previous September.

Of her eleven previous pregnancies ten had been normal, while one terminated as a miscarriage.

The uterus reached to the level of the umbilicus, and was of normal consistence.

Claimant's stout build made examination difficult. The foetal heart was not heard, but foetal movements were appreciated.

This claimant alleged right sided pelvic pain following the normal delivery of this child, but no gynaecological condition could then be discovered to account for it. In any event a gynaecological condition, following an accident during a pregnancy which had not been involved in any way, and not apparent until over four months after the labour, could not bear any relation to the injury.

Fall at Five Months: No Involvement.

Contracted Pelvis.

A (2) 6. Mrs. J. H. K., aet. 29 years, on 4/6/21 fell from a tramway car, sustaining injuries to her face and head, with considerable shock. Examined five days later, she included in her complaints, fear as to the effect of her accident on her then pregnancy. Her menses were of 4-5/28 regular type, the last period commencing on 9/1/21.

Her previous three pregnancies had been normal.

The uterus and contents were normal, foetal movements being easily felt.

In this case there was a degree of contracted pelvis, which, though not suggested by the previous history, might have complicated this labour, leading to allegations of disablement following trauma, or intra uterine involvement had a still born child resulted.

Fall at Five Months: No Involvement.

Panniculitis.

A (2) 7. Mrs. C. or M., aet. 37 years, on 22/12/21 slipped on a defective piece of paving and fell. When examined, one week and four days later, she complained, among other things, of a shooting pain in the right side and the fear that her then pregnancy had been involved. Her menses were of the 7/28 type, the last period commencing in the beginning of July.

Her previous ten pregnancies terminated normally.

The pregnancy was normal and the child alive.

The painful part of the side was a patch of adipose tissue in the abdominal wall. This panniculitis, not very common in pregnancy, perhaps resulting from ovarian inactivity, was, of course, unrelated to the injury.

Fall at End Sixth Month: No Involvement.

A (2) 8. Vide full report, Mrs. C. in section on the Medical Report.

Fall at Six Months: No Involvement.

A (2) 9. Mrs. McG. or McI., aet. 24 years, on 14/2/23 tripped in a defect in the paving and sustained injuries to shoulders and back. When examined six weeks and five days later, she embraced with her complaints the fear that her pregnancy had been involved. Her menses were of the 3/28 regular type, the last period commencing on 20/9/22.

The child, vertex presenting, could easily be felt moving, and a heart was heard. Claimant was small and the prospect was mentioned in the opinion that the labour might be tedious or complicated.

Fall at Six Months: No Involvement.

Leucorrhoea after Trauma.

A (2) 10. Mrs. R. L. or McM., aet. 24 years, on 18/9/20, tripped on a broken piece of the roadway. On 12/10/20, three weeks and three days later, among other things, she complained of the possible involvement of her then pregnancy. Her menses were of the 5/28 regular type, the last period commencing on 20/3/20.

Her only previous pregnancy terminated normally.

The child was alive at the time of the examination, and occupied the first vertex position.

Claimant's generally contracted pelvis was noted and mentioned in the report.

An interesting feature in this case was the absurd allegation that leucorrhoea came on immediately after the accident. Leucorrhoea is normal in pregnancy and varies with the individual. It is seldom absent in a multiparous woman.

Fall at Six Months: No Involvement.

A (2) 11. Mrs. E. Q. or O'H., aged 29 years, on 29/11/22 was attempting to board a tramway car when the conductor pushed her off with the result that she fell. On 17/12/22, two weeks and four days later, she complained of severe bruising and discolouration of the left hip and buttock, and worry regarding the possibility of her pregnancy having been injured. Her menses were of the 7/28 type, the last period commencing early in June.

She had previously had five normal labours.

A live child in the third vertex position was found.

In this case the bruising to the buttock was of a most severe nature, and marked pain with extreme discolouration persisted for weeks.

Fall at Six and a Half Months: No Involvement. Coccydynia.

A (2) 12. Mrs. J. S. or S., aet. 29 years, was on 15/1/22, standing on a chair in order that she might insert a coin in the gas meter. The chair slipped. Patient grabbed at the shelf which supported the meter, but this gave way and patient fell to the ground, the meter falling upon her. She sustained very severe injuries to her back, and bruising over the breast bone. On 17/2/22, four weeks and five days later, patient complained that she could not lie on her back or right side because of a pain at the foot of her spine. She had in addition severe pain over her breast bone, was sleepless and was sure her baby was dead. Her menses were of the 3/28 regular type, the last period being early in June.

Three previous pregnancies were normal.

The pregnancy, despite this considerable trauma, was uninvolved. Patient had a definite traumatic coccydynia.

Slight Trauma at Six and a Half Months.

No Involvement: Degree of Hydramnios.

A (2) 13. Mrs. A. S., aet. 23 years, on 2/3/22 tripped while ascending the common stair at her home, and fell. She sustained injuries to the left arm and hand, left leg and ankle, and to the left side. On 18/3/22, two weeks and two days later, she complained of pain and contraction of the ring and little finger of the left hand, pain on the left side of her abdomen, sleeplessness, fainting fits and worry as to the effect of her accident on her current pregnancy. Her menses were of the 7/28 regular type, the last period commencing on 14/9/21.

One previous pregnancy was normal.

Claimant and her husband made this examination very difficult indeed. He insisted on being present and adding to every point in the involved story she gave. Their very enthusiasm suggested collusion, he being her only witness, and as there was not as much as a single mark on her body the honesty of their allegations became very questionable. I may candidly say I could not accept a single phrase in their story as true.

Under these circumstances the slight degree of hydramnios became of great importance. This condition could not be caused by trauma, yet its sequelae, premature labour, uterine inertia, post partum haemorrhage/

haemorrhage, malpositions etc. would offer a favourable case for individuals of this type supported by the class of lawyer they would consult.

GROUP A (3).

INJURIES IN THE LAST THREE MONTHS WITH NO INTERRUPTION OF THE PREGNANCY.

Fall at Six Months: No Involvement.

A (3) 1. Mrs. McK., aet. 34 years, on 6/6/25 put her foot into a hole in the pavement and fell, injuring her left ankle, while her abdomen came into violent contact with the ground.

Examined eight weeks and two days later, she complained of occasional pain in the left ankle.

Claimant was well advanced in her tenth pregnancy at the time of her accident. The nine previous had terminated as follows:- seven normals and two miscarriages. Her last monthly illness had occurred some time in the previous January, but she was quite unable to give me any approximate date, nor could she indicate to me the time at which she was first conscious of feeling the movements of her child. Since the fall, while for a time the movements were in abeyance, there had been no indication by bleeding or other symptom that the pregnancy had been involved.

Examination of the abdomen, rendered slightly difficult by her adiposity, showed an uterus of normal consistence, and of a size corresponding roughly with her suggestion that her pregnancy dated from January. The child could be felt in the uterus, and its movements were quite freely appreciable.

Urinary examination was negative.

I was of opinion in this case that there had been no suggestion of involvement of her pregnancy, and/

and that any abnormality occurring therein, subsequent to my examination, would be a thing apart from her accident.

Fall in Sixth Month: No Involvement.

A (3) 2. Mrs. M. McC. or T., aet. 24 years, on 26/3/25, while carrying her child, stepped into a hole near the edge of the kerb, and fell, sustaining injury to the left ankle.

A factor in this case,which might have proved serious,was the fact that at the time of her fall claimant was six months pregnant, having last menstruated some time in September. For a period following her accident the movements of her child seemed to have been reduced. These movements, however, had recovered by the time of my examination. Investigation of this pregnancy demonstrated the fact that it had progressed without interruption. The child was alive in the third vertex position, the second most common position, and there had been no uterine bleeding.

A pain complained of by patient at the lower margin of her ribs was due to intercostal neuralgia, a condition quite common in late pregnancy.

I was of opinion that the pregnancy was quite uninvolved, and any complication which might later develop in regard to her pregnant state, would be a thing apart from her accident.

Fall at Six Months: No Disablement. Constipation.

A (3) 3. Mrs. C. McD., aet. 24 years, on 18/6/24 caught her foot in a defective grating and fell.

Examined three weeks later, among her complaints she included fear for the possible involvement of her then pregnancy, and persistent pain on the left side of the abdomen.

The pregnancy was normal, the child alive. Her left sided pain, situated over the descending colon, resulted from extreme constipation.

Fall at Seven Months: No Involvement.

Bleeding Alleged Same Night.

A (3) 4. Mrs. B., aet. 28 years, on 28/8/24 tripped over a tramway rail and fell.

Seen two weeks later, she complained of a persistent pain in her right side, a red coloured discharge from the vagina on the night of the accident, and, fourteen days thereafter, the passing of a large clot.

The pregnancy was found to be progressing normally. Claimant had been examined a few days after her accident by another medical man, and in his report he said: "There has been no uterine haemorrhage since "the accident". The whole claim was a trumped up effort and was later dropped.

Fall at Seven Months: No Disablement.

A (3) 5. Mrs. M. L. F., aet. 39 years, on 17/12/21 fell, through her foot catching in a hole in the roadway. She injured her right ankle and left leg and feared that her fall might have interfered with her then pregnancy.

The uterus, of normal consistence, was enlarged to size of a seven to seven and a half months' gestation.

The foetus was felt occupying the second vertex position, its heart sounds being easily heard.

Gas Explosion.

No Involvement of a Seven Months' Pregnancy.

A (3) 6. Mrs. N., aet. 27 years. On 1/5/25 a gas explosion occurred in the house next to the one in which claimant resided; as a result of this she sustained severe shock, but did not receive any bodily injury.

At the time of examination, 11/5/25, one week and three days after her accident, claimant explained that she had noted that her unborn child had ceased to move for a full day after the accident.

Her menstruation was of the four day type, the last period, which lasted for seven days, occurring on 3/10/24.

She had previously had two children, both of them having been born normally.

Since the accident there had been no bleeding, nor had there been any suggestion, apart from the temporary cessation of movement, that the pregnancy would be involved. I detected, by palpation, a child occupying the first vertex position. The size of the uterus corresponded roughly to her dates. I detected with no difficulty movements of the foetus.

The opinion was expressed that there was no remaining disablement, and that any obstetric complication which might later become apparent would be a thing apart from the accident.

Fall at Seven Months: No Involvement.

Slight Accidental Haemorrhage.

A (3) 7. Mrs. K., aet. 31 years, on 1/7/25, while descending from a car, had one foot on the ground when the driver started suddenly, causing her to be precipitated to the ground, as a result of which she sustained skinning of both knees, and discolouration of her back.

At the time of examination, four weeks and three days later, she complained of a "dragging pain" in her back, and of a bleeding which appeared on the day following her accident and cleared up that same day. Claimant was pregnant at the time of her accident.

Previous History. Her two previous pregnancies were a twin labour and a normal.

Her pregnancy, which dated from her last menstrual period on December 17th, was interfered with slightly, as was demonstrated by some bleeding which made its appearance on the day following her accident. For some time thereafter the movements of the child became markedly reduced, but they later returned, and there had been no further suggestion of bleeding.

The pregnancy was progressing normally, the uterine size and consistence corresponding to a normal pregnancy, the dates of which concurred with patient's history. The child was alive, as demonstrated by the ready palpation of its movements.

The/

The urine was normal.

In this case it was my opinion that the pregnancy had been in no way interfered with, and any abnormality later developing in it would be a thing apart from her accident. The backache of which she complained could not be intensified by pressure and movement, and could quite readily be explained by her advanced state of pregnancy.

Fall at Seven and a Half Months: No Involvement. Threatened Accidental Haemorrhage.

A (3) 8. Mrs. G., aet. 28 years, on 8/7/23 tripped in a defective paving. Among her complaints when examined three weeks later, was the dread that her then pregnancy might be involved. She was then pregnant for the tenth time. Her first labour, an instrumental one, had been complicated by haemorrhage, the others were normal.

The child was alive, occupying the first vertex position.

A little bright red bleeding had occurred on the day following the accident. Labour was normal at term.

Injury at Seven and a Half Months: No Involvement.

A (3) 9. Miss Y., aet. 20 years, was on 9/2/24 hit by a tramway car.

Examined thirteen days later, she had no complaints, but expressed fear that her then pregnancy might be adversely involved by her trauma.

There was absolutely no injury in this case. It is an engrossing example of the extent to which the compensation aspect of Obstetrics has developed to find an uninjured unmarried woman intimating, to a Corporation, a claim on behalf of her unborn illègitimate child.

Fall at Seven and a Half Months: No Involvement.

A (3) 10. Mrs. M. H., aet. 22 years, on 30/7/21 stepped on a loose grating which tilted under her weight and she fell, injuring her left leg and right side. She was worried regarding the effect on her current pregnancy.

No abnormality was discovered.

Shock at Seven and a Half Months: No Involvement.

A (3) 11. Mrs. H., on 24/1/21 was travelling by tram-car which came into collision with a motor fire engine. She was not injured but was afraid that her then pregnancy might have suffered as the result of the considerable fright she experienced.

The pregnancy was progressing normally. In this case the external and internal pelvic measurements were half an inch under normal. This was noted in the report lest an involvement of labour should later be alleged.

Fall at Eight Months: No Disablement.

A (3) 12. Mrs. M. A. on 18/4/21 tripped in a hole in the pavement and injured her legs, arms, and back. She was worried as to the possible effect on her current pregnancy.

This primipara was examined four weeks later. The uterus was of the size to be expected in an eight months' pregnancy. The child was in the first vertex position, its head well into brim of pelvis. The uterine consistence was normal and foetal movements and heart could be readily appreciated. The opinion was expressed that the pregnancy had not been involved, and that any abnormality which might later develop would be a thing apart from the accident.

Fall at Eight Months: No Involvement.

A (3) 13. Mrs. M. E., aet. 25 years, on 2/8/22 caught her foot in the space left by a broken glass prism in the foot pavement. She injured her left knee and left elbow, and feared an involvement of her then pregnancy.

Patient had had three normal births and one miscarriage. She was examined four weeks after the fall. The uterus was enlarged to the size found in an eight months' pregnancy, the foetus being palpable in the second vertex position, with the head somewhat extended. The foetal heart was audible.

Fall at Eight Months: No Involvement.

A (3) 14. Mrs. M.D. was, on 23/11/22 descending from a tramway car when she was thrown to the ground. Two weeks later she complained of pains in the abdomen, and the fear of losing her then pregnancy.

Nothing abnormal was discovered.

Injury at Eight Months: No Disablement.

Haemorrhoids.

A (3) 15. Mrs. D. D., aet. 37 years, on 6/3/24, when about to descend from a tram car, was thrown to the ground as the result of the car suddenly starting.

Examined six days later, she complained of pain in the left side of the back, and expressed fear that her current pregnancy might be interrupted. Patient also alleged that haemorrhoids, from which she suffered severely, had developed only since her fall.

The pregnancy was uninvolved, but the fact that the child was in the third vertex position was noted. The suggestion that her very extensive haemorrhoids resulted from her fall, and had been present for only six days, was, of course, absurd.

Fall at Eight Months: No Disablement. Clots passed Fortnight Later.

A (3) 16. Mrs. G., aet. 24 years, on 20/2/24 tripped and fell, sustaining some general bruising. She was, then, eight months pregnant and expressed fear that her fall might adversely effect her child. There had been slight clotted bleeding fourteen days after the trauma, lasting only one day. There was no abnormality but the third vertex position of the child was noted.

Fall at Eight Months: No Disablement.

A (3) 17. Mrs. F., aet. 24 years, on 30/8/21 tripped over defective part of paving and injured her left arm in her fall. She feared the effect on her current pregnancy.

Uterine size and consistence were normal, the presentation was normal, while movements and heart could be appreciated.

Fall at Eight Months: No Disablement.

Intercostal Neuralgia.

A (3) 18. M. H. or R., aet. 35 years, on 26/10/22 was hit and knocked down by tramway car. Four weeks later she complained of pain down the right side, and worry regarding the effect on her then pregnancy.

No abnormality was discovered. Foetal movement was felt but, owing to the adiposity of the abdomen and a very strong uterine souffle, the foetal heart sounds could not be heard.

A pain of which she complained between her ribs was a neuralgia, possibly a low grade toxic type.

Fall at Eight and a Half Months: Normal Delivery.

A (3) 19. Mrs. W. S. or H. on 22/8/22 caught her foot in a defective piece of paving and fell. Pregnant at the time, she had great anxiety regarding her then pregnancy and its possible involvement.

From the time of her fall until her labour she remained in bed, and was later normally delivered at term some three weeks after her fall.

Fall at Eight and a Half Months: Normal Delivery.

A (3) 20. Mrs. M., on 26/6/24 was dragged for a considerable distance by a tramway car. At the time she was eight and a half months pregnant and was later, on 14/7/24, normally delivered.

Premature labour was alleged, but examination of the child proved this out of the question.

Fall in Last Month: No Involvement. Third Vertex changes to First Vertex between Fall and Delivery. Extreme Nervous Debility.

A (3) 21. Mrs. L., aet. 30 years, on 2/10/20 was travelling in a tramcar, when a car following collided with it, whereby she was thrown to the floor. She fainted following the accident, and was taken home, where she developed headaches and sickness. Ten days later, when I saw her, she was hysterical and showed a traumatic neurasthenia. The possibility of this, her fifth full time pregnancy, being involved, added greatly to her worry.

The pregnancy was found uninvolved. The child occupied the third vertex position. Claimant's general debility and nervousness was such that I arranged for her admission to hospital, where she remained till term. During that time the foetus altered its position to a first vertex. This alteration of position was all for the best, but it may have importance where the converse alteration from a first to a third vertex occurs after a fall. In one of my cases this happened and claimant's agent took an action in the Court of Session on the ground that his client's malpresentation resulted from her fall. The pursuer's medical man explained the malpresentation as the result of nervous involvement whereby the uterine nervous/

nervous mechanism was so influenced as to produce loss of tone of the uterine muscle, and permit the child to assume this unfavourable position. The court, of course, did not accept this flight of fancy. Lord Clyde, the Lord President, dealing with the medical evidence said, "That of pursuer is advanced theory, "that of defender accepted fact. I always prefer fact "to theory in my court".

Injury in Last Month: No Involvement.

A (3) 22. Mrs. McD., aet. 22 years, on 4/1/21 caught her foot in a hole in the pavement and fell, sustaining injuries to her knees, right elbow, and ribs. She was worried as to the effect of her accident on her gestation which was almost at term.

The pregnancy was uninvolved and I saw patient normally delivered four days after my examination.

Fall in Last Month: No Involvement.

A (3) 23. Mrs. S. R. or S., aet. 25 years, on 22/8/24 tripped over a defective piece of paving and fell injuring her right side and right ankle.

Examined three weeks later she expressed fear regarding the effect of this injury on her then pregnancy.

A living child in a first vertex position was palpated. The pregnancy terminated normally.

Fall in the Last Month of Pregnancy: No Involvement.

A (3) 24. Mrs. E. McG., aet. 29 years, on 3/12/24 caught her left foot in a defective pavement and fell, sustaining injuries to the left ankle, and bruising to the left side of her abdomen.

On examination some eight weeks later, she was perturbed as to the effect of her fall on her then pregnancy.

From the time of her fall, claimant maintained that she had "been in labour all the time" up to the birth of her child, which occurred on 13/12/24, and had at intervals during that period been attended by nurses and doctors from the Maternity Hospital.

The child was born normally, prior to the arrival of the nurse. It was her fourth child, a fully developed infant, and alive. This nurse attended claimant throughout her puerperium, during which time everything was perfectly normal. She was allowed up on her eighth day, and was visited by the nurse until the eleventh day.

Claimant at the time of examination complained that the umbilicus of her child was leaking somewhat, and that she thought the child was not "taking notice". This condition, of course, could in no way be related to her fall.

Injury in Last Month: No Involvement.

Foetal Heart Inaudible.

Post Maturity.

A (3) 25. Mrs. M., aet. 28 years, on 21/1/25 was dragged by a tramcar for a considerable distance, as the result of the car having started suddenly when she was boarding it.

On examination on 11/2/25, three weeks after the accident, claimant was worried as to the possible effect of this injury on her then pregnancy.

Patient appreciated active fotel movement for seven days after the accident, but thereafter movements ceased. There was, however, no uterine bleeding. Claimant had been three times pregnant, her youngest child being fifteen months old. Examination revealed a pregnancy which had progressed to full term. The child occupied the first vertex or normal position. I was unable to detect any foetal movement. There was a loud uterine souffle of such intensity that I was quite unable to hear the heart of the child. Considerable adiposity of the abdominal wall rendered this investigation also more difficult.

I re-examined this patient on 8/4/25.

Her child had been delivered on 21/3/25, the birth being a perfectly normal one, the child, according to claimant's statement, weighing over nine pounds.

Fall in Late Months: No Involvement. Slight Haemorrhage following Accident.

A (3) 26. Mrs. A. McL., on 29/3/25 tripped in a defective piece of paving, and fell.

On 7/5/25, five weeks and four days later, she complained of a reduction in her appreciation of the movements of her child, which gave her reason to fear that the accident might, in some way, have involved her child. Further complaints made were those of general discomfort, and a feeling of weight in the small of the back. She explained that she had some vaginal bleeding on the day following the accident. This haemorrhage continued at intervals until 3/4/25;since then there had been no recurrence.

Her uterus was of a size and consistence normal with her period of gestation. Palpation revealed a child occupying the third vertex position. Foetal movements were felt during this part of the examination, and a regular distinct foetal heart was easily audible, on auscultation. Vaginal examination confirmed these findings, and failed to reveal any suggestion of low implantation of the placenta or after-birth, a condition which might readily have been associated with claimant's bleeding.

I was of opinion that the slight bleeding suffered by patient was due to a minor degree of separation between the wall of the womb and the membranes/

branes or the placenta. The bleeding at no time was severe, and it had in no way debilitated claimant. The pregnancy was progressing normally. The fact that the child was in the third vertex position was a thing apart from claimant's injury. I was satisfied that her pregnancy had in no way suffered, and that any abnormality later developing in it, would be a thing apart from trauma.

Fright in Late Months: No Debility. Trace Albuminuria.

A (3) 27. Mrs. A. S., aet. 29 years, on 25/4/21 was in a tramway car, which left the rails, and collided with another car. She was not injured, but five weeks later complained of pains in her back, pains in the back of her head, sickness, and reduction of foetal movement since the accident.

The pregnancy was uninvolved. A trace of albumen was present in the urine. Her mental balance was so obviously upset that the possibility of her developing insanity was noted.

GROUP B.

INJURIES AND MISSED ABORTION.

Suggested Missed Abortion - Three Months.

B 1. Mrs. B., aet. 37 years, on 14/2/23 tripped on a piece of defective foot paving. As the result of this injury she suffered discolouration and swelling of the left knee and also strain to the left side. At the time of my examination, 22/2/23, twelve days after the accident, her obstetric complaint was that of fear relative to the effect of the fall on her current pregnancy. Her menstruation was of the 5/28 regular type, the last period being on 13/11/22.

She had had nine normal pregnancies.

Patient presented a healthy appearance.

Vaginal examination revealed that the uterus was enlarged and softened. There was a good Hegar's sign. These findings suggested a two months' pregnancy. There had been no bleeding since the accident. The question of the pregnancy having died in utero was raised.

On 29/3/23 a second examination was made. The uterus was distinctly larger than on the occasion of the last examination.

These two examinations eliminated missed abortion and demonstrated that the pregnancy was proceeding normally.

At the first examination the size of uterus did not quite correspond to history of amenorrhoea, so, in spite of absence of vaginal bleeding, care had to be taken lest the pregnancy had died and been retained in utero./

utero. This case is a good example of the group which must be examined on a second occasion prior to the expression of a definite prognosis.

Missed Abortion - Two and a Half Months.

B 2. Mrs. D., aet. 23 years, on 26/4/22, tripped over an uncovered trap. As the result of this injury she sustained bruising to the left foot, ankle, and left side of the abdominal wall. At the time of the examination 12/5/22, sixteen days after the accident, she suffered pain in the regions mentioned above. Her obstetric complaint was that, for fourteen days following her fall, she had suffered from vaginal haemorrhage. This bleeding started immediately after her accident, clots having appeared in the haemorrhage, but no fleshy lumps. Her menstruation was of the 7/28 regular type, accompanied by slight pain before, and with slight loss. She was uncertain regarding her last period but believed she would be three and a half to four months pregnant.

She had not been previously pregnant.

She was a very stout young woman.

Her abdomen was fat but revealed no abnormality. No pain was elicited on pressure being applied.

Vaginal examination revealed no noteworthy pigmentation, a velvety cervix and no bleeding. Patient's stoutness made the examination difficult. The uterus was enlarged to the size of a two and a half months' gestation.

It/

It was necessary to give a guarded prognosis. The uterine size with the history might suggest an error in dates, with threatened abortion, or missed abortion. Necessity for further examination after a two months' interval was indicated.

The further examination was not granted till 17/11/23, i.e. seven months later. At the time of my second examination, 17/11/23, she complained of left sided pain. Her obstetric complaint was that six days after my previous examination she passed a lump the size of her two hands and four days later bleeding eased off. Since then her menstrual periods had not been so regular as before, varying in type from one to two days and recurring at intervals of three to five weeks.

Her menstruation was now alleged to be of the 1-2/21-35 irregular type, but was now painless.

The woman presented a robust and healthy appearance. There was no suggestion of anaemia nor of nervous involvement.

The abdomen was adipose, with a patch of panniculitis on the left side. On applying pressure to this region patient said "that is my pain".

Vaginal examination revealed normal internal genitalia.

Missed abortion was confirmed by history and examination.

The/

The irregularity of the menses and stoutness suggested some ovarian insufficiency.

Here was another example of a case calling for two examinations. In this particular example the second examination did not take place until after the uterus was empty. Had this abortion been retained longer, and the second examination made prior to the uterine contents being voided, the lack of uterine growth and the retrogression of signs of pregnancy, other than amenorrhoea, would have settled the diagnosis.

Probable Missed Abortion - Four Months.

B 3. Mrs. K., aet. 37 years, on 13/7/22, fell from a tram which had started suddenly. As the result of this injury, she suffered extensive discolouration and swelling of the right thigh and buttock,as also backache,and the involvement of her four months' pregnancy. At the time of the examination, 6/10/22, three months after her accident, she complained that there had been pains which became increasingly severe till 7/9/22, when she had a flooding, and something came away, followed by discharge for ten days, but that she had since then been all right. Her menstruation was of the 3-4/28 regular, average loss type, her last period, which was a normal one beginning on 25/9/22.

Previous pregnancies - four normals, two forceps and the present case of abortion.

Vaginal examination revealed normal multiparous internal genitalia.

Urinary examination proved negative.

The serological test was not applied, on account of the satisfactory obstetric history.

Nothing in the nature of specific infection was suggested.

The facts of this case at first suggested that patient either:-

(1) Might not have been pregnant at all.

(2) " have miscarried at six months.

or (3) " have had a missed abortion.

The/

The first medical man to see this case did not even note in his report that claimant was pregnant. She should, of course, have been examined internally then, and the necessity for a further examination reported. Fortunately, from her own doctor, whom I knew, I was able to confirm that the pregnancy had existed and also that, when she aborted, the uterine contents were not developed beyond early pregnancy.

This case emphasised the necessity for vaginal examination in all early pregnant cases complicated by injury, even in the absence of bleeding.

G R O U P   C.

HAEMORRHAGES FROM THE NON-GRAVID UTERUS FOLLOWING INJURY.

Bleeding Evening of Accident: ?Corpus Luteum Injury. Neurosis and Menopause.

C 1. Mrs. M. McG., aet. 48 years, on 7/1/24 tripped over a defective part of the paving and fell, injuring the left side of her neck, the left shoulder and both knees. She also sustained severe strain to her back.

Examined some three weeks later, patient's complaints consisted mainly of severe backache, nervousness, and sleeplessness, coupled with the fear that the vaginal bleeding from which she suffered might have a serious consequence.

The haemorrhage, I discovered, commenced on the evening of her accident, became more severe the following day, and continued for ten days. Her doctor was called in on account of this bleeding two days after its commencement. She was quite satisfied that she was not pregnant at the time, her periods having been perfectly regular, her last one terminating on December 24th. She had had twelve full time, natural births and three miscarriages.

Vaginal examination revealed the parts normal to a woman who had been so frequently pregnant. The cervix was lacerated and the uterus was normal in consistence, size and position.

From consideration of the history and of the facts elicited at examination, I was of opinion that the bleeding resulted from the impact of her fall which possibly/

possibly caused bleeding into a corpus luteum. Such haemorrhage produces premature menstruation.

Patient's nervous condition was not satisfactory. She was highly strung and her fine tremors and exaggerated knee jerks indicated that she had sustained distinct shock by this fall. My view was that it would be at least a month before patient would be able to carry on her household duties in the ordinary way.

Traumatic Neurasthenia - Panniculitis. ?Corpus Luteum Involvement after Sub Total Hysterectomy.

C 2. Mrs. J. McK., aet. 34 years, on 20/2/25 tripped on a defective piece of paving. In falling she twisted her left ankle.

On examination some two weeks later, she complained of a severe left-sided pain over the lower left quadrant of the abdomen, and severe haemorrhage per vaginam, which conditions had developed shortly after the accident.

Prior to her marriage, this lady had had performed the operation of sub-total hysterectomy, and although most of her uterus was then removed, a small part of the body had been left, from which part she had had menstrual periods. From the fourth month prior to her accident, however, these periods had ceased, but within twenty four hours of the injury the vaginal bleeding commenced, and this haemorrhage continued for nine days, attended by pain on the left side.

An area of panniculitis was present on the left side of the abdomen. Her nervous state was such that I considered vaginal examination was definitely contra-indicated.

She had very marked tremors of fingers, eyelids and tongue, while her knee jerks were markedly increased. Her whole manner was hysterical, and once or/

or twice during our interview she completely broke down. The bleeding per vaginam is a condition found not infrequently after a fall. The fact that claimant had this operation, of course, ruled out any possibility of her having been pregnant, and having lost that pregnancy. This example definitely suggests the possibility of an ovary with a corpus luteum involvement.

Metrorrhagia following Injury: ? Corpus Luteum Involvement.

C 3. Miss S. M., on 14/4/24 fell over an iron grating which had been left lying on the paving.

Examined on 6/5/24, three weeks and one day later, among other complaints she mentioned that, although her usual 7/21-28 type period was only a fortnight prior to her fall, she had on the day following her accident, commenced to bleed, this haemorrhage lasting three days. The haemorrhage had been preceded by sickness. The genitalia were normal.

Metrorrhagia on Day after Injury.

?Corpus Luteum Involvement.

C 4. Mrs. C. McL. or McK., aet. 44 years, on 20/2/24 placed her foot in a hole in the pavement and fell.

Examined ten days later, she complained among other matters of vaginal haemorrhage appearing on the day following her fall and lasting for two days.

The genitalia were normal.

Metrorrhagia Two Days after Injury: ?Corpus Luteum Involvement.

C 5. Mrs. E. McQ. or C., aet. 26 years, on 12/6/24 tripped on a defective paving, injuring her abdomen.

Some five weeks later, she complained of vaginal bleeding.

Claimant's last regular 3/28 day period had been on May 28th. Haemorrhage started two days after her accident and lasted four days (June 14th to 18th). It recurred on June 27th for six days. The genitalia were normal.

Uterine Haemorrhage Two Days after a Fall: ?Corpus Luteum Injury.

C 6. Mrs. D., aged 22 years, on 3/6/23 caught her foot in a defective piece of paving, as a result of which she fell, twisting her right ankle.

Examined about two weeks later, she complained of severe pain on the inner surface of the right foot, with inability to use the foot. She explained further that her menstrual period appeared two days later, although not due, and was excessive, lasting for ten days instead of seven.

Claimant had had one child.

The menstrual periods were usually of the 7/28 regular type, the last one being on April 11th. This irregular period, the one already mentioned, arrived on May 5th and lasted ten days.

As this claimant's home circumstances did not suggest a satisfactory internal examination, I delayed this examination in order that claimant could call at my rooms. This she later did but her genitalia were apparently quite normal. This case is another of the type which possibly results from corpus luteum injury.

Haemorrhage Three Days after a Fall.

?Corpus Luteum Involvement.

C 7. Mrs. M. P. S., aet. 25 years, on 13/5/25, tripped on a defective paving, while carrying her child, sustaining injuries to the right elbow, and to the right knee.

At the time of examination, 26/5/25, one week and six days after her accident, she complained, among other minor worries, that her next successive monthly period had arrived on the 16th instead of the 21st of the month, and had lasted for seven days instead of her normal four to five days.

She had fine tremors of fingers, tongue, and eyelids. Her knee jerks were considerably increased and her story was told in a halting, nervous manner. At times she seemed almost verging on hysteria. She had become distinctly introspective.

The bleeding was possibly due to injury to a corpus luteum.

Haemorrhage Two Days after Fall: ?Graafian Follicle Injury.

C 8. Mrs. McW. S., aet. 41 years, on 1/6/23 caught her foot in a defect in the paving, and sustained injuries to her right arm and side.

On 13/6/23, one week and five days later, she expressed among her complaints, fear that the presence of an irregular menstrual period, which commenced two days after her accident, and lasted for six days, might indicate serious internal trouble.

Her menses were of the 3/21 regular type with slight clotting. They were attended by pain in the left side and back. Claimant had been pregnant five times. These pregnancies ended as follows:-

1, 3 and 5 - normal.

2 and 4 - early abortions.

There was nothing amiss found on examination of the genital organs.

In my opinion the actual trauma, and the uterine haemorrhage had ceased to give trouble. The latter following an injury is an indication of the action of shock, or possibly injury to a Graafian follicle. She had no remaining disablement.

Metrorrhagia following Injury:
?Graafian Follicle Involvement.

C 9. Mrs. M. A. McG. or Y., aet. 35 years, on 1/10/24 tripped on a defective flagstone and fell, injuring her right hip, knee and lower leg.

Examined ten weeks later, she complained of irregularity of her menstrual periods.

Her period, which had ceased on the 21st of September, returned two nights after her accident and lasted for ten days, as against her normal four to five day period. It again returned on November 1st, when it lasted five days and again on November 25th, when it lasted six days. Her usual period recurred every twenty six days.

She had had five full-time pregnancies.

The painful areas in hip and abdomen were due to panniculitis.

I located a non-pregnant uterus, normal in size and position.

It is noteworthy that there may be a slight alteration in cycle following a haemorrhage of this type.

Metrorrhagia Four Days after a Fall.
?Graafian Follicle Involvement.

C 10. Mrs. M. S., aet. 41 years, on 10/6/25, tripped on a defective piece of paving, injuring her right leg, from the ankle to the knee.

At the time of examination, five weeks and two days later, she complained of irregularity in her menstrual illness.

Patient had completed one of her regular three day periods on June 7th, her accident was on June 10th, and on June the 14th a second bleeding occurred. This bleeding lasted all told for a fortnight, and was particularly severe on the 19th of June. She had had eight normal births, the last having occurred six years previously. At the time of my examination there was no suggestion of bleeding. The posterior part of the vaginal entrance, or the perineum, was lax. The neck of the womb was lacerated, as is ordinary in women who have borne a series of children. The uterus was in normal position, was quite mobile, and there was no apparent involvement of the other genital parts. There was a history of sickness and vomiting after the accident, the straining of which may have ruptured and destroyed a ripening follicle .

Metrorrhagia following Injury.
?Graafian Follicle Involvement.

C 11. Mrs. J. E. or B., aet. 44 years, on 6/11/24, caught her foot in the edge of a ventilator which protruded above the level of the pavement, and she fell, injuring her face, right shoulder and both knees.

When examined some two weeks later, she explained that, although her last regular monthly illness had only ceased seven days prior to her accident, that five days subsequent to that fall she bled, and that two days thereafter she again suffered vaginal haemorrhage. Menstruation was of the seven day type, recurring at intervals of three or four weeks. She had five of a family. Internal examination revealed the presence of some cystocele and rectocele, while the cervix was lacerated. The uterus itself was in normal position. She mentioned that if at any time she were sick, she was quite liable to have an irregular menstrual period.

This exemplifies again the possibility of Graafian Follicle involvement, while her description of irregularity of menstruation following sickness is on a par with Haig Ferguson's views already quoted.[x]

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[x]Trauma and Ovarian Pathology, p. 89.

Metrorrhagia following Exposure to Coal Gas.

?Corpus Luteum Involvement.

C 12. Mrs. T. R., aet. 40 years, was on 29/2/24 exposed to coal gas, and subsequently suffered severe giddiness and extreme sickness lasting four or five days.

Examined on 19/3/24, two weeks and five days later, she complained of occasional headache, slight cough, shortness of breath, and intermittent palpitation. Her next regular period, expected on 23/3/24, arrived on 10/3/24, and lasted three days.

The uterine haemorrhage was an indirect result of the gassing, and was probably stimulated by claimant's repeated vomiting. This case is closely allied, in my view, to that of Mrs. J. E. or B., number 11 in this group.

Bleeding following Accident - Non-Gravid: ?Early Rupture of Graafian Follicle.

C 13. Miss M. L., aged 30 years, on 16/12/23, was hit by a falling rhone pipe which injured her head, right shoulder, and neck.

Some five weeks later she complained that her neck was still painful on movement, and that she was subject to occasional giddiness and sleeplessness. A further complaint was that, fourteen days after her accident, she had had an uterine haemorrhage, which lasted for seven days, and this haemorrhage returned on the morning of my examination.

Patient's monthly illnesses were generally regular, and of the 3-4/28 painless type. Prior to this accident she had never had any suggestion of irregularity. She complained of a tendency to constipation.

The history of her recent monthly illnesses was as follows:-

The last normal period was from the 13th until the 16th of December. On the 1st of January haemorrhage returned and lasted for seven days, and there was a recurrence on the 24th of January which lasted for four days.

The internal examination was made at my Dispensary at the Samaritan Hospital on 28/1/24, when I discovered that patient had a somewhat small, undeveloped, acute anteflexed uterus. There was nothing abnormal/

abnormal in the genitalia.

In my opinion patient's remaining disablement was nervous in character. It was not what I would have described as a neurasthenia, but what might be classified better as nervous excitability, following a shock. If she continued her unoccupied existence her tendency to introspection might accentuate this condition. The uterine haemorrhage had no serious significance. It was due probably to the premature rupture of a Graafian follicle with resultant early menstrual discharge. Ensuing periods were normal.

Return of Menses Seven Days after Injury. Congenital Retroversion: ?Graafian Follicle Involvement.

C 14. Mrs. M. A. F. or F., aet. 33 years. On 13/2/25 her foot sank into a hole in the pavement. As the result of this accident she sustained an injury to her right arm, and a strain to the right side over the area of the appendix.

When examined on 24/2/25, one week and four days after her accident, she explained that on the day of her fall she was menstruating. Three days thereafter menstruation ceased. Haemorrhage again started on 20/2/25 and stopped on 23/2/25.

In view of the history of menstrual disturbance, I suggested that more complete examination should be made. This further examination was conducted on 23/3/25.

Investigation of the genital organs revealed the fact that this claimant had a retroverted retroflexed uterus. It was small in size, and of the type commonly found in this position, as the result of a congenital defect. She had been six years married, and had no family. Her periods, which until the time of her injury had been regular, were of the 4/28 day type, the first day always being somewhat painful.

This case moves me to ask:- "Can a Graafian "Follicle have ruptured at the time of this accident, and "may/

"may this seven days delayed haemorrhage result from
"the degeneration of the Corpus Luteum which would
"develop after such rupture?"

Delayed Menstruation following Trauma.

?Graafian Follicle Involvement.

C 15. Mrs. A. H. (Vide case G 23.)

Suppression of Menses following Injury.

?Corpus Luteum or Graafian Follicle Influence.

C 16. Miss R. McE. (Vide Case G 3).

These cases, C 1 to 16 are considered in the section dealing with "Trauma and Ovarian Pathology", on page 89.

Alleged Vaginal Haemorrhage:
Examination Refused - Repeated Malingering.

C 17. Mrs. R. C., aet. 34 years. (Vide Case D 8).

Bleeding during Lactation: No Pregnancy.

C 18. Mrs. A. M. or C., aet. 29 years, on 1/7/20, was travelling in a tramway car, when she sustained a severe blow on the back. She could not, however, give me any details with regard to the facts of her accident, but was of opinion that a collision had taken place.

Examined on 27/7/20, three weeks and five days after her accident she complained of having sustained a blow between her shoulders. She further explained that she had had an uterine haemorrhage, which lasted for the two days following her accident. Bleeding was repeated on 25/7/20, again lasting for two days.

There was no remaining sign of trauma.

Her menses were of the 7/28 regular type. Patient had had a child (her seventh) three months before and was feeding it partly by breast, at the time of the injury. In view of the recent haemorrhage I did not make a vaginal examination. The uterine haemorrhage was in my opinion not in any way connected with the accident but appeared, from the intervals between the bleedings, to be the return of menstruation. Although patient was lactating at this time, the appearance of menses during that process is very common. In this case I should have liked to have been afforded a further opportunity of examining patient internally, when the menstrual period had passed off, in order to confirm my views and to make sure that the uterus had not been displaced. ------------

Uterine Haemorrhage after Fall and Menopause: Vaginal Examination Refused.

C 19. Mrs. C. G., aet. 44 years, on 5/5/21 tripped on the street paving, sustaining an injury to her knee.

Examined on 9/6/21, five weeks later, she included in her complaints worry with regard to an "internal haemorrhage" from the "front passage", which occurred on 7/5/21.

She had had her "change of life" two years previously. She went to the infirmary but was not detained. The bleeding continued for three days.

Patient, although I pointed out the advisability of making an examination of the genital organs, quite definitely refused to permit such an examination.

In the absence of an internal examination I could make no statement as to the cause of the bleeding of which patient complained.

Acute Retroversion - Bleeding Two Days after Fall: Traumatic Retroversion.

C 20. Mrs. N. or S., aet. 41 years. On 21/12/23 the paving under her foot gave way and she was precipitated feet first into a cellar. Her buttocks caught in the broken paving and her descent was suddenly arrested. As a result of her accident she sustained bruising and discolouration just above both knees, bruising and discolouration of the under aspect of the buttock and involving the right side of the external genital organs, discolouration and bruising over the left upper arm and ribs, and general shock.

On examination some five weeks later, she complained of sleeplessness, occasional hysterical attacks, pain in the lower part of the right buttock, and nervousness. A further complaint was that of bleeding per vaginam.

Pressure to the right side of the external genitalia, at the base of the buttock, over the tuber ischii, produced wincing and complaint of severe pain, while pressure on the coccyx was also painful. The labia were normal, the swelling and discolouration there having passed away. Internal examination revealed the fact that patient's uterus was larger than normal, of firmer consistence and heavier. The cervix was eroded, and the uterus was in a position of retroversion. Patient had marked fine tremors of the fingers/

fingers and her knee jerks were extremely brisk.

Her obstetric history was a satisfactory one. She had had three children, the youngest being eight years of age, all of them having been born normally. Her monthly illnesses, which had always been regular and of fair loss, lasted for five days and recurred every twenty eight days. Until this fall there had been no irregularity whatever. These points were fully confirmed by Dr. F., patient's medical attendant, a gentleman I know well and on whose history I could confidently rely.

In this case in my opinion patient had disablement remaining from this accident as undernoted:-

1. A degree of coccydynia.
2. Pain on pressure over the right tuber ischii, due possibly to a degree of periostitis.
3. Functional nervousness amounting to a neurasthenia, due to the shock of this accident.
4. Uterine haemorrhage resulting from what I consider to have been an acute retroversion.

This last condition is one which may occasionally arise in mothers, as the result of a sudden backward fall, more particularly if the uterus be fibrotic, as it was in this case, and the bladder full.

The pain in 1. and 2. would take some considerable time to clear up and might even be, in degree, persistent. The bleeding in 4. had ceased at the time of examination, but patient's periods might be of longer duration/

duration than normal, while the backward displacement remained. This condition could be put right by the insertion of a pessary, or it might be necessary at a later date, if more severe symptoms developed, to correct this condition by operative interference. In 3. the nervousness which was considerable, would best be treated by a complete change, and would not entirely pass away until patient had resumed her ordinary duties.

Haemorrhage after Fall during Lactation: ?Temporary Retroversion.

C 21. Mrs. A. L. C., aet. 28 years, on 25/9/22 caught her foot in a defective piece of paving. In falling she bruised her left shoulder.

On examination on 11/10/22, two weeks and two days after the accident, she complained of occasional slight pain in the shoulder. She was further worried with regard to a vaginal bleeding which commenced on the evening of her accident and had lasted until the 27th of September.

Her menses were of the 6/28, painless, average loss type.

She had had three normal pregnancies.

Patient was a fat, pale, anaemic-looking woman. She had had a child thirteen weeks previously, and had risen on the tenth day of her uneventful puerperium. Her child was having one breast feed per diem.

Vaginal examination was rather difficult owing to patient's build. The vagina showed signs of laxity with a tendency to prolpase of both walls. The uterus was of normal size, and in the position of anteflexion, but it was very freely movable.

I was of opinion that patient's vaginal haemorrhage was probably the result of a temporary retroversion of the recently pregnant uterus. The laxity/

laxity of the organ suggested this possibility. On the other hand, one could not overlook the possibility of it being the early return of menstruation, more particularly when patient was not breast feeding her child as she should. In any event she had no disablement as the result of her accident.

Haemorrhage immediately after Fall:

Cervical Carcinoma.

C 22. Mrs. R., aet. 36 years. (Vide page 10 Medical Report.)

Haemorrhagic Discharge from Erosion: Menopause.

C 23. Mrs. W., aet. 43 years, on 17/3/25 tripped on an uncovered trap in the street.

Five weeks later, when examined, she explained that she had not had a menstrual illness for six weeks prior to her accident. She, however, developed a pale pink discharge from the vagina on 19/4/25, which was still present on 21/4/25.

Investigation revealed the presence of panniculitis over the upper part of the buttocks, spreading laterally from the upper end of the sacrum.

She had had nine children, the last one having been born five years previously. Her confinements had been normal, but a further pregnancy in July 1922 developed in the right tube, and necessitated operative interference. She had not been pregnant since that date, and her monthly periods - which generally lasted four days, recurring irregularly at intervals of twenty one to twenty eight days, and were attended by heavy loss of blood - were quite usual until six weeks prior to her accident. The period of amenorrhoea was not attended by morning sickness, nor by any disturbance in the passing of urine, two symptoms which one generally expects with an early pregnancy.

The internal examination revealed an uterus, normal in size and position. It was somewhat harder than/

than normal, suggesting the condition of chronic metritis. The cervix or neck of the womb was extensively torn, and the everted surfaces soft and velvety. These surfaces bled slightly when scraped with the finger. This condition, known as laceration and erosion of the cervix, was the causative factor in the slight discharge which claimant suffered. There was nothing in the cervical findings to suggest the presence of an early cancer.

Patient's general demeanour was that of a highly strung woman.

I expressed the opinion that this nervous involvement was probably associated with her age, and with the "change of life" which was apparently affecting her.

I was satisfied that patient was not pregnant at the time of her accident. The absence of menstruation during these weeks I attributed to the onset of the menopause, and the presence of that little pink discharge, which did not appear until thirty two days after the fall, could quite readily be explained by the extensive erosion from which she suffered.

Uterine Haemorrhage Fourteen Days after Fall: ?Fibrosis Uteri.

C 24. Mrs. McI., aet. 32 years, on 12/1/22 tripped on the foot pavement, injuring her right shin and thigh, and bruising her forehead.

On 8/3/22, seven weeks and six days later, among other things she complained of vaginal bleeding, which commenced on the night of her fall, and continued until three days prior to my examination.

This vaginal bleeding contained clots, but was not attended by any severe pain. She was of the opinion that it was an abortion.

Patient explained that she had always felt well until August, 1921, when she had a miscarriage at three and a half months. She had had altogether seven pregnancies. Her first child was born at eight months, her second was also an eight month child, but was still born. Her next four pregnancies were normal; her last pregnancy concluded in the miscarriage above mentioned. Patient's menstrual periods were free, regular and of the six-seven/twenty one type, her last one being a week to fourteen days before her accident. She explained that it had not been so excessive as usual, and admitted that the thought of being pregnant had not entered her head until the bleeding began.

Vaginal/

Vaginal Examination. Patient had a caruncle of the urethra, a condition of long standing. The vaginal walls were lax, but not to the extent of constituting a prolapse. The cervix uteri was lacerated as is commonly found in women who have had a family. The uterus itself was large and firmer than usual and the adnexa were apparently normal. Urinary examination proved negative.

I took a specimen of patient's blood and had it submitted for examination. The result of this Wassermann test was negative.

On the question of the vaginal haemorrhage, I was not satisfied. Firstly, patient did not think she was pregnant until the haemorrhage commenced; secondly, the density of the uterus did not suggest to me a recent pregnancy; thirdly, no one apparently had seen the products of conception. I, in fact, felt disinclined to accept the theory that patient had been pregnant at all. I was rather inclined to look upon this bleeding as a gynaecological condition, of the nature of a metrorrhagia, contributed to by the general anaemia from which patient suffered, and probably by a degree of fibrosis uteri, a condition suggested by the hardness of the uterus itself. Her own medical attendant confirmed my view by a definite expression of opinion that no abortion had occurred and the case was dropped.

Alleged Metrorrhagia: Malingering.

C 25. Mrs. M. J. or F., aet. 36 years, on 10/10/22 fell through a trap door, sustaining an injury to her left side.

On 3/1/23, twelve weeks and one day later, she complained among other things of prolongation of her menstrual periods, which had since been irregular and painful, the flow being of a dark black colour.

Claimant had had nine full time children, six being alive at the time of my examination. She had had no miscarriages. Her last periods had been as follows:-

October 4th, lasted three days.
November 2nd, lasted a week.
December 3rd, lasted a week.
January 1st, still in progress at the time of my examination.

These periods had been "jet black", while between them she had had a white discharge.

As patient was menstruating at this time I did not intend to examine her, but thought the time very suitable to see an example of the jet black menstruation. This patient showed. She was wearing a stained chemise, but the staining was that of normal menstruation, and it was noteworthy that the stains were all dry. The fact that she had walked, to my knowledge, some distance to visit me suggested that it might be better to examine her at this time to make sure that she was having a period. This I did. The examination/

examination was not very satisfactory. Claimant complained of very severe abdominal pain over the injured side,and held herself so rigidly as to prevent my being able to palpate the uterus bi-manually. I had no doubt that the pain was exaggerated. Pain of the severity of which claimant complained, lasting since October 10th, would have left her a physical wreck, which she was not. The cervix uteri had a laceration of old standing which was the cause of her white discharge, and it did not point so distinctly backwards as in the normal case, yet not so much forward as to suggest a retroversion of the uterus. The vagina was normal. My glove was slightly stained by blood of normal colour and consistence, but there was so little as to suggest that the current period was almost completed.

Abdominal examination revealed no sign of injury. Patient continued to complain of the pain over the left side of the abdomen, and was very rigid during palpation. All patient's complaints were relative to subjective symptoms, and I could not find anything to support her contention.

In my view she was grossly exaggerating a trivial injury and using normal menstruation as an additional complaint. I asked for a re-examination at the end of three weeks but ere then her claim had been withdrawn.

Metrorrhagia Two Days after a Fall: Menopause Established.

C 26. Mrs. H. M., aet. 48 years, on 23/6/24 tripped on a defect in the pavement.

On 11/7/24, two weeks and four days later, she was in an extremely neurotic and hysterical state which made vaginal examination impossible, though such investigation was indicated because of uterine haemorrhage, which occurred two days after her fall and lasted fourteen days.

For some months prior to my examination claimant had experienced very irregular menstrual periods. Subsequent to the examination and the haemorrhage described, the menopause was established.

Haemorrhage immediately after Fall.

C 27. Mrs. S. M. or S., aet. 37 years, on 18/3/25 tripped in a hole in the ground and fell, injuring her left side.

When examined on 8/4/25, three weeks after her accident, she explained that three days prior to the fall her regular monthly illness had ceased. She, however, bled slightly on 18/3/25, one clot coming away. The next regular period arrived on 8/5/25 and lasted the usual five days.

There was no condition discovered to explain her bleeding which was very slight.

GROUP D.

INJURIES AND ABORTION.

Abortion (Ten Weeks) following a Fall.

D 1. Mrs. A. J. C. on 13/6/20, while reaching to the gas meter to insert a coin, fell to the floor, injuring her right elbow and back. At the time of her fall she was ten weeks pregnant. On the night of the accident, she suffered abdominal pain and vaginal haemorrhage, with the expulsion of solid material. Vaginal discharge lasted for three weeks thereafter.

At the time of examination, fifteen weeks later, I found a non-gravid uterus with slight bilateral cervical laceration. Her menstrual periods were normal, not suggesting endometritis; she had had nine normal births with no abortions; urinary examination was negative, and the Wassermann reaction negative. I reported that the delay from the time of the accident made it impossible to say if there had actually been a pregnancy and early abortion, but that, if her statement was accepted, there was present no etiological factor other than trauma.

Abortion (Three Months) following Shock and Trauma.

D 2.

Mrs. H., aet. 37 years, on 19/8/20 fell down the stairs at her home. She injured her right leg in the middle third of the thigh and, in the early morning following her fall, she developed pains in her abdomen, followed shortly thereafter by abortion.

Previous History. Eight normal births, one premature, one abortion.

On examination, five weeks later, the uterus, in normal position, was found to be a little larger than usual. All the usual points were investigated except serological examination which was refused. In this case there was medical evidence that abortion actually had occurred.

Abortion Alleged: Vaginal Examination Refused.

D 3. Mrs. H. McG., aet. 42 years, on 20/2/23, while inserting a copper in the gas meter, fell backward, injuring her head. Pregnant two months at the time, she alleged miscarriage on the day of the accident.

She had had thirteen full time children, and neither prematures nor abortions. When the trauma was sustained, four weeks prior to my seeing her, she was said to be two and a half months pregnant. She refused vaginal examination so I explained to her that while she had the say in these matters, I would report her refusal. It was noteworthy that though she had been regularly attending an hospital for dressings to a wound on her head, she had not mentioned there either her pregnancy or her abortion. This case I am satisfied was an attempt to exaggerate injuries sustained, and only was fustrated by the suggestion that the state of the internal genitalia be investigated.

Abortion: Cystic Ovaries.

D 4. Mrs. M. O'D., aet. 28 years, on 21/6/21 tripped on a broken piece of paving. She injured her abdomen, and both knees were cut and discoloured. When examined eight weeks later she explained that, three weeks after her accident, she began to bleed per vaginam and that she had then aborted at three months. Her remaining complaint was left sided pain.

When I examined her, the uterus, which did not suggest recent pregnancy, was non-gravid, and bilateral cystic ovaries were readily palpable. Her story was confirmed as, after her fall and prior to her abortion, she had been examined at the Maternity Hospital and her pregnancy confirmed. There was nothing in her constitution to explain abortion, and, though three weeks had elapsed since her injury, I have no doubt that was the causative factor.

Threatened Abortion after a Fall.

D 5. Mrs. P., aet. 38 years, on 20/11/22, was struck by a tramway car while crossing the roadway, and fell, sustaining bruising and discolouration of forehead, immediately above the root of the nose, and ecchymoses of left eye, left shoulder, hip, and outer aspect left knee.

At the time of her fall she was two months pregnant and sixteen days thereafter she had bleeding lasting three days. She had medical attention then. I indicated that I would prefer to delay my examination for two months which I did. The pregnancy progressed normally. Here again, there was no history nor constitutional defect to explain her haemorrhage, and had the pregnancy been interrupted trauma would have been the only possible explanation. This case exemplifies the very considerable trauma to which a pregnant woman may be subjected without aborting.

Abortion (Two Months) following Trauma.

D 6.

Mrs. R., aet. 33 years, on 27/2/22, tripped on a defective piece of paving. In falling she injured her right side.

On the night of her injury patient, who was two months pregnant, aborted. She had medical attendance. When I examined her two weeks later the uterus was still soft and there was a little reddish discharge. She was distinctly anaemic.

Abortion (Three Months) after a Fall.

D 7. Mrs. M. D. or S., aet. 39 years, was on 7/10/22 thrown to the ground from a tramway car. She fell heavily on her buttock, sustaining severe bruising, and next day lost her three months' pregnancy.

This, her tenth pregnancy, was the only one which had not proceeded to term.

Malingering - Alleged Abortion.

D 8. In accordance with instructions from defender's agent, I, on 24th December 1923, medically examined Mrs. O'B. or C. of 314 B. Street, Bridgeton, with regard to injuries alleged to have been sustained by her on 17th December, when she tripped in a defect in the paving in B. Street near her address. In falling, she sustained the following injuries:-

Left Leg: From the mid point of the shin to the knee, discolouration and bruising.

Left Arm: Similar injuries from shoulder to elbow.

She also sustained a blow to the left side. Following her fall, she suffered from pains in her back and complained that she had frequency of micturition. Prior to her accident, she had not had a menstrual period since the end of the previous September, but her bleeding commenced again on 18th December and had been continuous since. She feared that she had been pregnant and was threatening to abort, or had already aborted. She had eight children, the youngest being three years of age, all of them having been born normally, and never had a pregnancy of hers terminated prematurely.

Examination. Left Leg: There was no remaining sign of injury in this area. Movement was full and strong. There was slight swelling below the part/

part where the injury was located, but this resulted from an old standing varicose condition of the veins.

Left Arm: Movement of the arm was full and strong. There were no signs of injury.

There were no suggestions of involvement of the nervous system.

A vaginal examination was made and the uterus was felt to be in normal position and of normal size. It was not softened, as one would expect if a pregnancy had existed since the end of September. The metrorrhagia had proceeded for six days, whereas the normal period in this instance was one of three days, recurring at intervals of twenty eight.

In my opinion, patient had recovered from any bruising of leg or arm which she might have sustained. The question of the uterine bleeding was a difficult one. We had to accept patient's statement as to the duration of that bleeding, and as to the fact that she had had no period since the end of September. My examination certainly did not suggest that the uterus was, or had recently been, gravid, but I could not, in an alleged pregnancy so young as this, deny that a pregnancy had existed. I arranged with patient to see me in the course of a month at my Dispensary at the Samaritan Hospital and should anything of value be noted then, I would further communicate with defender's agent.

One month later she stated that the bleeding, which had commenced on December 18th, had been continuous and that it had lasted until January 26th. Apart from feeling generally weak, she was otherwise, she said, in good condition. She alleged that in the course of this bleeding lumps the size of a hand had come away.

Vaginal examination revealed a lacerated cervix and an uterus normal in position, consistence and size. In fact the findings were identical with those of my examination of 24th December. Patient was not anaemic, and had none of the symptoms which I would have expected to result from a bleeding so long drawn out as that described to me by her. While naturally unwilling to report abruptly that this individual was malingering, I was not prepared to accept much of her story in the absence of definite medical evidence supplied by her own attendant, relative to this haemorrhage.

In going over my file, I noted, with interest, that on the 3rd of February of 1923, I examined Mrs. C. and a daughter, who were then alleged to have sustained injuries. Also, as far back as 29th December, 1920, I again had had an opportunity of meeting this lady, this time accompanied by another daughter, the type of accident and the injury corresponding very closely with the details of the accident of 1923. After the first of these accidents, patient complained of vaginal haemorrhage/

haemorrhage, but refused examination. On the second, involvement of the genital organs was not alleged, but in this third one, an involvement was again suggested.

It was noteworthy that in relating the history of this last case, patient omitted all mention of her bleeding in 1920, and stated that she had had seven normal births, one being a twin pregnancy.

The findings of this examination, and of my last examination, did not suggest to me that the uterus was gravid. On both occasions patient resisted examination in a manner unnecessary in a woman who has had so many children. Added to these points, the omission of all previous history of accident, roused in my mind a very natural suspicion that what history had been given was unreliable. A woman who had bled as patient alleged she had, would surely have called her private medical attendant. Defender enquired if such attendance had been performed, and had a negative report from her medical man. Thereafter liability was repudiated, and the claim was ultimately dropped.

Abortion following Injury.

D 9. Mrs. I. O'N. or M., aet. 44 years, on 5/5/24, while mounting a tramcar, was knocked down and dragged by the car.

Examined three days later, she was bleeding per vaginam, the haemorrhage having commenced on the evening of her accident. Her doctor was able to confirm that she had suffered a two months' abortion.

Alleged Miscarriage following Injury.

D 10. Mrs. M. H., aet. 23 years, on 17/10/24, was boarding a tramcar, when the car suddenly started, dragging patient for some distance. As the result of this injury she sustained bruising and discolouration over the lower half of the right side of the chest.

For seven weeks prior to the fall she had not menstruated. On the night of her accident bleeding commenced and lasted for half an hour. During the following week she had pains in her abdomen, and eight days after her accident a discharge was again seen, being on this occasion of greater volume, some solid material coming away with it on the following day. Her own medical advisor did not see her until the 28th of October, when he examined her and from her history expressed the view that she had suffered from a miscarriage. At the time of his examination, he did not have the opportunity of seeing any material which had come away, as none of this had been preserved. On internal examination I found her genitalia, like her general physique, underdeveloped, and her uterus of the rudimentary type, small and very hard, and lying in a position of acute anteflexion.

The history in this case very definitely suggested an early miscarriage, and had this woman previously borne children, or had I discovered the slightest suggestion of enlargement or softening still present/

present in her uterus, I should have been forced to accept that theory. It is, however, not uncommon for women comparatively recently married to go over the time of a monthly illness without being pregnant, and my finding such an underdeveloped uterus of such small size and dense consistency, three weeks from the time of an alleged abortion, did not concur with the history of this case. It was my view that claimant's uterus had never been pregnant.

Abortion at Two and a Half Months following Injury.

D 11. Mrs. C., aet. 36 years, on 15/9/24 tripped on a broken flagstone.

Examined on 15/10/24, four weeks and two days later, she complained of pain in her left side and of having aborted within twenty four hours of her accident.

At the time she was two and a half months pregnant. Her medical attendant confirmed her allegation. At the time of examination the genitalia were normal and no signs of recent pregnancy were appreciable.

Alleged Abortion: Examination Refused.

Malingering.

D 12. Mrs. J. A., aet. 36 years, on 4/6/24 caught her foot in an unguarded drainage shaft, and fell, sustaining injuries to arms and legs.

For eight weeks prior to the fall she had not menstruated. On the third evening following her accident she felt, she alleged, "cramps" in her abdomen and next day "with a noise like the clap of a "hand" she aborted. Bleeding was severe for three weeks thereafter, but she did not call in a medical attendant. She refused to permit vaginal examination, and the peculiar history, coupled with this refusal and the absence of any signs of anaemia, very definitely suggested that her story was not reliable. Her claim was later dropped.

Injury at Three and a Half Months:

Alleged Threatened Abortion.

D 13. Mrs. M. S. or G. (Vide case A (2) 1.)

Alleged Abortion.

D 14. Mrs. C. (Vide Case G.21).

G R O U P   E.

INJURIES AND THE PREMATURE CHILD.

Sapraemia, Prematurity, Infant Debility.

E 1. Mrs. B. aet. 34 years was on 17/5/21 thrown to the ground while boarding a car. As the result of this injury she suffered pains across her back and sickness. At the time of examination, 14/7/21, eight weeks and two days after her accident, she complained of pain in both sides of her abdomen and constipation. Her obstetric complaint included the allegations that premature labour, disablement of her child, and a sapraemia which complicated her puerperium resulted from her fall. Menstruation - 5/28 regular, painless, last period mid September. Previous pregnancies - four normals.

The date of this, her fifth labour, was 25/6/21, i.e. thirty seven days after accident. At the end of a week of sapraemia following her labour a piece of placenta the size of a hand was expelled. Her doctor confirmed this.

(1) Sapraemia. It is just possible that this accident may have produced a slight retro placental haematoma which proved etiological in the retained placental lobe, but the sapraemia cannot be considered as being due to the accident as the missing part should have been noted and removed at the time of the birth.

(2) Prematurity. Child nineteen days old.

There/

There was no suggestion whatever of prematurity which was not even indicated from the maternal history.

(3) Debility. It was alleged also that infantile vomiting, constipation and an attendant ophthalmia were due to the injury to the mother. Enquiry revealed the fact that the child was being fed on Nestle's milk which, I am satisfied, was the explanation of the digestive disturbances.

The discharge from the left eye was an infection. There was no maternal tissue damaged by the fall to provide a nidus for any infection, so the ophthalmia, (it was apparently a simple one,) could have no relation to the mother's injury.

Accidental Haemorrhage and Premature Labour.

E 2. Mrs. I., on 25/5/21 fell to the street while attempting to board a tramway car. As the result of this injury she "felt upset". At the time of the examination, 13/6/21, two weeks and five days after her accident, she complained of pain in the right foot and shock. Her obstetric complaints included the allegations that vaginal bleeding, premature labour, suppression of flow of milk until the third day after birth, and a continuing yellowish vaginal discharge, were due to her fall. Menstruation - 6/28 regular, painless, last period 13/9/20. Previous pregnancy - one normal.

Date of this, second birth, 26/5/21, i.e. one day after the accident.

Vaginal examination was refused so the causative element in leucorrhoea was not discovered.

It is noteworthy that claimant visited friends after this fall and that her bleeding began five hours after the trauma. This bleeding continued for nineteen hours after which the child was born.

The labour was due, according to dates, on June 20th, but the child was born on May 25th, i.e. it was alleged that the child was almost a month premature.

Child: nineteen and a half inches long, seventeen days old. Weight not available.

Nails/

Nails beyond finger tips.

Plump and well formed.

No wrinkling or redness of skin.

Soft downy hair upper arms and back.

Naevi over each eye, on nose and occiput.

Feeding: Breast, irregular.

Bowels: Constipated, castor oil used.

Toilet: Bathed once daily since birth by certificated midwife.

The history of feeding, bathing, constipation and its treatment indicated that the nurse, who was not present, had not considered the child as being premature. The examination concurred with the view taken by the nurse. This case well exemplifies the extreme value of the detailed history in allegations of prematurity.

If this child was before term it certainly was not a month early, and had suffered in no way from the trauma.

The complaint of the milk being suppressed for three days, coming from a woman, twice already a mother, indicates at once the possibility of imagination being allowed to run riot. I was surprised not to have the naevi attributed to the fall, but probably claimant had been advised regarding these.

Fall at Eight Months: No Disability. Irritability and Inguinal Hernia in Child.

E 3. Mrs. M., aet. 22, on 5/11/22 accidentally placed her left leg in an uncovered hydrant. As the result of this injury, she sustained bruising to the left leg and left side, and also shock. At the time of the examination, 5/1/23, eight weeks and five days after her accident, she complained of occasional left sided pain. Her obstetric complaint was the allegation of the presence of irritability and inguinal hernia in her child born normally.

Child: Eighteen days old. It was of normal build and development and in no way suggested prematurity.

The causative factor in the irritability was the irregularity with which the child was fed. The hernia, on the right side, was a congenital condition which could not have resulted from trauma.

Prematurity and Convulsions after Trauma in Utero.

E 4. Baby McG. aet. 42 days. The mother of the child was dragged along by a tramway car on 30/10/23. At the time of the examination, 25/1/24, twelve weeks and three days after the accident, complaint was made that the child was taking "turns". The obstetric complaint was the allegation of Premature Labour, while convulsions, since developed in the child were also attributed to the injury.

The child was born on 14/12/23. The labour was not expected until the beginning of 1924.

Patient's doctor, called at 2 a.m., delivered with forceps an hour later. He told me that he had had no indication for the application of the instruments.

There was no bleeding with the birth, and the placenta separated normally. The practitioner in attendance had not considered the prematurity sufficient to indicate special treatment.

Child: Fed at breast.
Clothed like full time child.
Bathed twice daily since birth.
Boy, normal and mature.
Nails beyond finger tips, no down, no redness of skin or weak cry, subcutaneous fat well formed.
Feeding: Breast every two hours.
Stools: Regular motion, quite often dark green.

Recalling/

Recalling the uncertainty of the dates given by patients who have no "axe to grind", when we meet a case of this variety, where no dates are offered as to last period or arrival of quickening, the allegation that the child was a fortnight before its time is one deserving little serious consideration. That the suggestion had a flimsy foundation is revealed by the findings in this case, considered with the feeding, clothing, and twice daily bathing - all approved by the medical attendant.

The difficult element in this case is that of the etiology of the convulsions which the child is said to have suffered, and which are alleged to have resulted from trauma sustained in utero. These turns, said to consist of "shaking all over and rolling the "eyes", had occurred on five or six occasions, and were said to be initiated if the baby was lifted high. In these seizures the child might be "very pallid or very "blue".

It is noteworthy that the only superficial injury recorded when the mother was examined fifteen days after her injury by a colleague of mine, and when the uterus and contents were found normal, was "discolouration on the inside of the left thigh over "the lower third".

From a traumatic involvement of this type, considering the protective agency of the amniotic fluid I cannot imagine any injury likely to be etiological/

etiological in the "seizures" alleged, and when, in a case of this type, we have three accepted etiological factors, faulty feeding, evidence of intestinal derangement, and a forceps delivery, more particularly in the absence of an indication, I refuse to accept the theory suggested by claimant.

Alleged Prematurity.

E 5. Baby M. On 4/5/23 the mother of the child fell while alighting from a tramway car. At the time of the examination, 5/6/23, six weeks and six days after the accident, complaint was made that the child was very small, and that it slept practically all day. The obstetric complaint was the allegation of premature birth, and the fear that the child's prospects of surviving were not good.

Menstruation: 4-5/28 regular type, painless, average loss, the last period being in September, the exact date unknown. No recollection of quickening.

Labour lasted twenty hours, and was unattended by ante-partum haemorrhage, or adherent placenta.

The mother and the midwife who attended did not expect the birth for at least three more weeks.

The last menstrual date was not recalled, but September was said to be the month. This would agree with allegation of prematurity.

Child: Nineteen inches long.
Six and a half pounds.
Skin not red, no fine down.
Body well covered, considerable subcutaneous fat.
Nails beyond finger tips.
Breast fed, content, "sleeps a great deal".

In/

In this case the nurse wished to support claimant's allegation, and had her books at hand to prove the case by her dates. She quickly modified her view on the prematurity when I, having asked about feeding, bathing etc. and found the child's routine was that of a full time healthy infant, put it to her that surely she had neglected her duty in permitting such routine when, as a Certified Midwife, she should have refrained from bathing the child, when she should have rubbed it with oil, and taken measures to ensure its being suitably clothed and guarded.

The child was undoubtedly a full time infant.

Alleged Prematurity and Hernia.

Prolapse alleged to follow.

E 6. Mrs. W., aet. 28 years, on 2/11/22, caught her foot in a projecting causeway stone. As the result of this accident, she sustained injuries to her left leg. At the time of the examination, 3/1/23, eight weeks and six days after her accident, her obstetric complaint was that she felt "her womb "coming down".

Menstruation: 6/28, regular, last period end of February, 1922.

Previous Pregnancies: Five normals.

Date of this, sixth pregnancy, 30/11/22, i.e. twenty eight days after the accident.

The walls of the vagina were somewhat lax.

The uterus was larger than the usual non-gravid organ, but was in good position.

Child: Eight pounds, eight ounces. Twenty one inches. In no way premature.
Left congenital inguinal hernia.
Nurse attended confinement.
Labour lasted twenty one hours.
No ante-partum haemorrhage - no adherent placenta.

Alleged Prematurity.

E 7. Baby M., aet. one day. On 26/6/24 the child's mother fell from a tramcar and alleged that her labour consequently came on prematurely.

Examined on 15/7/24, the following were the findings:-

No redness of skin nor fine down.

Considerable subcutaneous fat.

Limbs - firm and well formed.

Bones well covered.

Size and weight normal.

Finger nails protruded beyond the ends of the fingers.

Child breast fed.

No regular feeding had been instituted.

Naevus in Child alleged to follow Intra Uterine Injury.

E 8. Baby K., born on 18th September 1925, was brought to me with the allegation that a birth mark from which it suffered had resulted from an injury applied to its mother on August 1st, 1925.

The naevus, the size of a florin, was bright red in colour and was a typical angioma. By chance it was located in an area of the back corresponding to the area injured in the mother.

This simple tumour must, of course, have been present at a date prior to the mother's accident, and the similarity of position could only have been chance.

GROUP F.

INJURIES WITH PREMATURE LABOUR OR ACCIDENTAL HAEMORRHAGE.

Still Born Child Eight Days after a Fall.

F 1.

Mrs. D., aet. 29 years, on 28/4/23, tripped on a defective bit of paving and fell heavily.

Examined on 8/6/23, five weeks and six days later, she complained of having had a premature labour terminating in a still born child eight days after her accident.

For three days prior to the delivery there had been vaginal haemorrhagic discharge. Her two previous pregnancies had been full time normal deliveries. While her last menstrual date was uncertain, the prematurity was confirmed by reference to the books of the outdoor department of the Maternity Hospital.

The urine was normal, there was no suggestion of specific involvement, the previous history was blameless and the interval between injury and labour short. The etiological factor was doubtless traumatic.

Accidental Haemorrhage and Premature Labour.

F 2. Mrs. I. (Vide Case E 2).

Alleged Prematurity: Retroversion alleged to result from Accident in Late Pregnancy.

(Vide Case E 4).

F 3. Mrs. E. T. or McG., aet. 39 years, on 30/10/23 was dragged by a car, injuring her right thigh over the lower third, and sustaining shock.

Examined on 25/1/24, twelve weeks and three days later, she complained of left sided pain, and of having suffered a premature labour.

Claimant stated that from the time of her accident on October 30th until the birth of her child on December 14th, that she did not feel well. During that time she was satisfied that her labour would terminate prematurely, and she alleged that the labour of December 14th was premature. She did not expect the birth prior to the beginning of January. Her menstrual periods had been of the 4/28 painless type, and had always been regular, but she could not tell me the date of the last period prior to her injury, nor could she even give an approximate idea of that date or of the month, and further she could not tell me the date, far less of the month, when she first felt foetal movements. According to her story, her labour lasted a week, but her doctor who was present at the examination, was only called at 2 a.m. on the morning of the 14th, the membranes having ruptured two hours previously. He applied instruments and the whole birth

was/

was completed by three o'clock.

This was patient's fifteenth pregnancy. Of these children, the one in question excepted, all of them born alive at full time, only six had survived. She had never had a miscarriage nor a premature labour, and this was the first occasion upon which instruments had been used. Her doctor informed me that the child was born in the first vertex position, and he did not suggest that the instruments had been applied because of any abnormality in the child, the passages, or the forces of labour. For fourteen days after the confinement, Mrs. McG. was kept in her bed and since then she had suffered from a dragging pain in the left lower abdomen. At no time between her accident and the birth was there any suggestion of bleeding. The birth itself was unattended by haemorrhage and the after birth came away naturally with nothing abnormal being noted regarding it.

I examined patient internally with a view to discovering the cause of her left sided pain. My examination revealed the following pathological conditions:-

The condition of the genital organs was such as one might expect in a woman who had had so many pregnancies. The introitus was gaping, and the anterior wall of the vagina bulged outwards, including in it the bladder wall to form the condition known as cystocele. The degree to which this bulging protruded was/

was considerable. The cervix uteri was extensively lacerated from previous confinements, and the uterus, which was a large one, was lying in the position known as retroversion.

The nervous system showed no involvement, and patient did not seem unduly anaemic or debilitated.

In my opinion patient's discomfort arose from the conditions found in her genital organs and described above. These conditions had arisen from frequent pregnancies. They could not, by any stretch of imagination, result from the injuries which she sustained when dragged by the car. It was my considered opinion that she had no disablement which could be attributed to her accident. The child was fully developed in every way.

Alleged Premature Labour.

F 4. Mrs. M. (Vide Case E 5).

Alleged Premature Labour.

F 5. **Mrs. W. (Vide Case E 6).**

[illegible]

Premature Labour: Placenta Accreta.

F 6. Mrs. J. S. S. or W., aet. 31 years, on 14/4/23, was thrown to the ground while attempting to board a tramway car.

Examined on 3/5/23, two weeks and five days later, she complained that within an hour of her injury, her "waters broke" and that intermittent gushes of fluid continued for a week; thereafter, a seven months' child was born. The birth was complicated by a retained placenta and haemorrhage in the third stage of labour.

The placenta was ultimately removed in the Maternity Hospital under anaesthesia, and was described as being morbidly adherent.

The urine was normal, Wassermann reaction negative and the first labour normal. The child was premature and ill nourished. The labour was doubtless stimulated by the trauma.

Fall at Seven and a Half Months: No Involvement. Threatened Accidental Haemorrhage.

F 7. Mrs. G. (Vide Case A (3) 8).

Slight Haemorrhage in Late Months.

F 8. Mrs. A. McL. (Vide Case A (3) 26).

GROUP G.

INJURIES AND VARIOUS UNCLASSIFIED OBSTETRIC AND GYNAECOLOGICAL CONDITIONS.

Sapraemia and Trauma.

G 1. Mrs. B. (Vide Case E 1).

Exposure to Coal Gas: No Disablement.

G 2. Mrs. D., aged 38 years, on 3/1/21, was exposed to coal gas and rendered unconscious.

Seven weeks later, she expressed fear as to the effect of her experience on her then pregnancy.

Seen at five and a half months, the pregnancy had progressed normally, but a previous history of her last two pregnancies terminating at five and a half months, and two and a half months respectively, suggested the necessity for cure. Fortunately this pregnancy carried to term when a healthy child was born.

Suppression of Menses following Injury.

?Graafian Follicle Influence.

Amenorrhoea for Six Weeks.

G 3. Miss R. McE., aet. 35 years, on 24/11/24 fell on the stairs, as the result of defective lighting in the common close at her home, injuring her back.

Two weeks later, she complained of disturbance of menstruation.

Her last normal period occurred on 24/10/24, being of her regular 7/28 day type, attended by some pain. She had just commenced to menstruate on 24/11/24, which change stopped suddenly following her fall.

Internal examination at this time revealed an anteflexed, slightly soft uterus.

A second examination was made on 12/2/25.

The next period should normally have occurred on 24/12/24. It was, however, exactly fourteen days late; while again a period arrived just a few days before this later examination. These periods were only four day periods.

Internal examination on this occasion was rendered difficult, as patient was extremely nervous. So far as I could make out, however, there was no alteration in the condition.

I was of opinion that since her fall there had been irregularity of menstruation, which had, however, apparently settled down into a new cycle - a four/

four day duration period with a longer interval.

The control of the commencing period might have resulted from premature rupture of a Graafian Follicle, with the early development of a new corpus luteum. The alteration of menstrual cycle after these bleedings is occasionally seen.

Phlegmasia Alba Dolens following Gas Explosion.

G 4. Mrs. F., aet. 28 years. On 15/1/25 a gas explosion occurred on the stair landing of the tenement where claimant resided. Immediately thereafter she felt herself getting heavy, was conscious of buzzing noises in her ears, and experienced great weakness. She did not, however, sustain any actual injury.

At the time of the examination, 25/6/25, twenty three weeks after her accident, she complained of general weakness, pain over her heart and abdomen, and intermittent buzzing in her head. Claimant was confined to her bed at the time of the explosion, having given birth to a child two days previously. On 17/1/25, her lochia, which should normally have continued longer, ceased, and on the day following the accident, her midwife called a doctor into consultation. She was transferred to hospital on 23/1/25, her condition being notified as puerperal fever. She was confined to hospital for some eleven weeks. Since her discharge from hospital she had not had a return of her menstrual periods.

The gynaecological examination proved quite negative.

As the result of my general examination, I was of opinion that this patient was extremely debilitated, that she was anaemic, and that her nervous system/

system was at that time unstable. I could not in any way attribute this to her having heard a gas explosion two days after her confinement, nor was there anything in the history of the case to suggest that she had, at any time, suffered from coal gas poisoning. It was a noteworthy fact that her child had been breast fed until she had been for two days in hospital.

The condition from which this individual seemed to have suffered was that known as white leg or phlegmasia alba dolens.

Such a septic process, bilateral in her case, could not possibly have resulted from her having heard a detonation. I reported accordingly and liability was repudiated.

Backache, Alleged Retroversion: Examination Refused.

G 5. Mrs. K., aet. 26 years, on 22/2/22, caught her heel in the space left by a glass prism missing from the paving. In falling she sustained injuries to her right ankle, right elbow and back.

On examination two months later, she complained of a constant dragging discomfort in the small of her back, a sensation which was aggravated by bending down.

Examination of the back revealed nothing to explain her complaint of pain.

I noted that patient's menstrual periods were of the 6-7/28 type, only slightly painful and regular until some sixteen months earlier. Since then, however, the pain had been intensified, and the interval between the periods had become irregular, being sometimes twenty eight days, sometimes twenty one, and occasionally only fourteen. In view of this history, coupled with the dragging pain in the small of the back, I thought it desirable to make an internal examination. Patient objected to this examination, so, explaining that it was purely a matter for her decision, I did not insist on it.

Opinion. In this case, I was unable to detect in ankle, elbow or back, any objective sign whatever of injury. The subjective symptom of dragging pain/

pain in the small of the back was the only complaint, but investigation showed other subjective symptoms - the pain and the irregularity of the menstrual periods, dating practically from the birth of patient's last child. These, I noted, she did not complain of in relation to her accident, but I felt that they must all be considered together. They were extremely suggestive of retroversion of the uterus. So far as my examination was concerned I could find no local cause for patient's complaint of backache.

Frequency of Micturition after Injury.

G 6. Mrs. J. McA., aet. 60 years, on 28/2/24, was knocked down by a lorry and injured her right wrist, right arm, and shoulder.

Examined on 16/4/24, six weeks and six days later, she, in addition, complained of frequency of micturition.

Claimant had had six children,and her parts were lax to a degree,but the anterior vaginal wall was not involved to such an extent as to be classified as a cystocele. There was no urethral caruncle, but the urethra was somewhat larger and more gaping than normal. The view was expressed that this frequency was nervous in origin and this proved correct, for at a subsequent examination the condition had cleared.

Injury to Vulva in Child.

G 7. Isabella McG., aet. 8½ years, on 16/10/20, placed her foot on a defective grating which tilted, causing both of patient's legs to go down the shaft.

Examined two weeks later, she told me that she had suffered from bleeding from her "privates" just after she fell, and for nearly a week had had a dark red discharge. For twelve hours after sustaining the injury she was unable to pass urine, and required hot foments over the lower abdomen.

The left labium majus was somewhat discoloured, having a distinct yellowish tinge, and pressure on it was painful, even at the time of my examination. There had apparently been a haematoma there, but I found no sign of laceration of the parts. The bleeding must have been from a small labial tear. The hymen was complete.

Whether the retention of urine was due to swelling of the parts or a nervous suppression I cannot say, but prefer the latter view, in that, despite the presence of a haematoma, foments overcame it at the end of twelve hours.

Alleged Vulvar Injury to Child.

G 8.

E. A., aet. 13 years, was injured on 13/4/21 by her left foot and leg entering an unguarded drainage shaft. She sustained skinning and discolouration of left thigh, a twist of the right ankle and a "hurt" between her legs.

Examined two weeks later, her only complaint was pain in the right inguinal region.

The genitalia were normal in every respect, the hymen unruptured. There was no history of urinary discomfort at any time. The other injuries had been trivial.

Alleged Injury to External Genitalia

(Twelve weeks after Delivery).

G 9. Mrs. McG., aet. 28 years, on 6/11/20, put her foot into an uncovered water toby, and sustained injuries to her back.

On examination one week later, claimant complained of pain in back and "privates".

There was some slight discolouration over the buttocks, but the genitalia were perfectly normal.

Amenorrhoea, Trauma: Examination Refused.

G 10. Mrs. A., 48 years, on 7/5/23 caught her right foot on a projecting stone and fell, injuring her right knee and right side.

On examination three weeks later, she explained among other things that she had not had a menstrual period for some months.

Claimant would not offer her opinion as to whether her amenorrhoea was due to the climacteric or a pregnancy, and refused examination. I explained to her that it was a matter for her decision, and that I would have to include her refusal in my report.

Inguinal Hernia: Alleged due to Fall.

G 11. Mrs. A. G., aet. 22 years, on 8/1/21, tripped over a broken part of the pavement. Two weeks after her fall, she complained of pain, and a "lump" in her right groin.

The painful swelling arose in the right inguinal ring, and passed down into the upper part of the right labium majus. It descended with an impulse on coughing, and could be reduced with a gurgle. The inguinal ring on the involved side was very patent.

The presence of the round ligament in the inguinal canal makes inguinal hernia in women much less common than in men. Traumatic hernia in a woman must be a most unusual condition, if ever found.

The production of such a condition results from a severe strain being put on a congenitally defective canal, but where the round ligament is present the tendency to such production is considerably reduced. Again the type of this accident, a fall in the street, rather suggested that the hernia was an older one than the history suggested, and the extreme size of the inguinal ring suggested that the sac had been present longer than the fourteen days between the accident and my examination. The whole case appeared to me to have a very questionable element in it, and, in my opinion, I strongly expressed the view that the condition was a thing apart from the trauma.

That/

That I was justified was to some extent confirmed by the findings in the case of the child, a boy of seventeen months, whom she was carrying. It was alleged that a loss of power of the left arm followed the fall, with a peculiar tetany like attitude of the hand on that side. To supplement my examination, I arranged that the involved area be investigated with regard to the muscular reaction to electric stimulation. For this purpose I arranged to have the child admitted to the Sick Children's Hospital where the senior physician at once recognised him. The child had been in the wards suffering from encephalitis and hemiplegia some three months earlier, and the condition found at this second examination corresponded exactly with that noted at the time of his dismissal after his illness.

The defenders repudiated this claim and the case was dropped.

Here we have illustrated a typical example of attempt to obtain compensation for pathological conditions of long standing.

Breast Abscess in Injured Nursing Mother.

G 12. Mrs. A. M. on 12/6/21 put her foot in a hole in the pavement and fell, sustaining general bruising. Examined three weeks later, she complained of pain in the left breast.

This pain in the breast, although the breast was not injured directly by the fall, developed three days after the accident. An incision had been made in the upper outer quadrant. A dirty dressing covered the discharging sloughy wound. This infective state was classed as being a thing apart from accident.

Traumatic Coccydynia.

G 13. Mrs. J., aet. 34 years, was on 27/9/21 knocked down by a Fire Engine. Seen two days later, she was critically ill and unfit for medical examination. It was then feared that she had a fracture of pelvis. For two days she had retention of urine.

Examined three months later, this claimant had made a wonderful recovery from very serious injuries. Her only complaint was that of severe pain at the foot of her spine. This was due to coccydynia following fracture of that bone.

Panniculitis, Erythema, Incontinence of Urine and Anal Haemorrhage alleged to follow Trauma.

G 14.

Mrs. McI., aet. 59 years, on 26/10/21, tripped and fell on a flight of stairs, owing to the defective lighting. She sustained injuries to the face, left arm and left side. On 5/12/21, five weeks and five days later, the following were her complaints:-

1. A painful swelling on the left side of the abdomen.
2. Incontinence of urine on coughing or straining.
3. Inflammation of lower abdomen, thighs and vulva.
4. Bleeding from the bowel.

Claimant's menopause was normal.

Her abdomen was very adipose and pendulous.

Examination revealed for all of these alleged results of trauma a definite cause. All were conditions of old standing either not noticed till the introspection following the accident, or intentionally suggested to mislead the examiner.

The left sided pain was due to the presence, in the superficial tissues, of a large dense patch of painful adipose tissue, or panniculitis.

Vaginal examination revealed a very considerable cystocele, which explained the loss of urinary control.

The inflammation of the lower abdomen, thighs, and vulva was an erythema, resulting from chafing of these parts, immensely adipose in this claimant, and irritated by urine.

The/

The rectal haemorrhage was explained by the presence of severe haemorrhoids.

In this instance I think claimant was quite honest in her belief that these conditions resulted from her injuries.

Cystocele Producing Inability for Work.

G 15. Mrs. M. L., aet. 63 years was examined with reference to her ability to resume and continue her duties with the Statute Labour Department. On 11/1/22, the date of my examination, she complained of pains in her legs and back, stiffness and weakness, a bearing down feeling and general weakness. Three months prior to my examination patient had been operated upon for prolapse of uterus. The menopause was normal.

Examination revealed the fact that the vaginal operation for the cystocele had been a complete failure. Again this hernia protruded, being the size of a clenched fist and hanging between the thighs.

Ventro fixation had also been performed and the lower part of the abdominal wound was suspiciously weak.

She was quite past the aid of a pessary and, very naturally, did not feel inclined for further operative interference.

Prolapse, Panniculitis, Retention of Urine, etc.

G 16. Mrs. D., aet. 56 years, on 2/12/21, tripped on a projecting piece of the roadway and fell, injuring her abdomen.

Examined two weeks later, she complained of feeling "all strained and as if her stomach was going "to drop out", in addition to pain on the right side of the abdomen, pain in the lower part of abdomen and upper part of thighs, and retention of urine for a day and a half after her accident.

Claimant, probably the most corpulent woman I had ever seen, told me that when last weighed some considerable time previously, she scaled over eighteen stone. Examination of the abdomen revealed in the abdominal wall patches of painful adipose tissue (panniculitis). On pressing these, patient squirmed, and said "That is my pain". The lower part of the abdomen and the upper part of the thigh were red and tender, this being due to erythema, a condition common in the remarkably obese. Examination per vaginam revealed that patient suffered from cystocele and rectocele, but that the uterus was in normal position, and did not tend to prolapse.

At a second examination on 14/11/22, I found the condition thus:-

"Since my last examination, claimant had been worried by a pain in her abdomen, more intense on the left side, on which side it extended from the navel to the/

the mid axillary line. From time to time, when exerting herself, she suffered slight 'dribbling' of urine. The right sided pain was still present from time to time. The pains in the upper parts of the thighs lasted six months, but troubled her very little at the time of examination."

This latter examination only went to confirm, in every detail, the conclusions which I reached in my first report.

The abdomen was very fat, and in it were areas in which dense tissue masses were palpable. On pressing these masses the skin over them assumed a puckered appearance, and patient complained of pain. I particularly asked at this examination if patient was sure that the pain produced on pressing these masses was the pain of which she complained, and she said, "Yes, that's my pain".

There was still some erythema of the lower abdomen and upper thighs, undoubtedly resulting from the friction of her overhanging abdomen.

Vaginal examination was as on the first occasion. The dribbling or incontinence of urine was part and parcel of patient's cystocele and weight.

Full examination of the nervous system showed no involvement.

Opinion. There was no disablement resulting from the fall. The only complaint which could at all be related with the accident was that of retention of urine/

urine for two days, and this was purely a result of fright, leaving no harmful results.

Chronic Appendicitis: Hyper Involution.

G 17. Mrs. McV., aet. 35 years, on 7/11/23, caught her heel in a hole in a close grating, and fell, sustaining injuries to her right ankle and right side. Six weeks later, she complained only of occasional pain in the right side and in her back.

The pain on the right side became marked on deep pressure in that area of the abdominal wall immediately over the appendix, and was due to a chronic appendicular condition and not to the fall.

Claimant had had seven naturally born children, her last child, of seven months, being still at the breast. She had had no menstrual period since the birth of this child. I made a bi-manual examination of the genital organs, the only noteworthy feature being the smallness of the uterus, which was in the condition known as hyper-involution. This was the result of the breast feeding. The genitalia were otherwise normal.

Pregnancy: Dermoid Cyst: Trauma: Laparotomy: Pulmonary Tuberculosis.

G 18.

23rd January, 1924.

In accordance with instructions from T. P. Esq., I wrote Mrs. J. McQ. of 43 A. Street, Bridgeton, and asked her to call on me for the purpose of medical examination on the 3rd of January. This she was unable to do, and forwarded a medical certificate to that effect. I therefore called on her at her home address on 12th curt., and then investigated her injuries.

History. Patient explained that on 18th ultimo, while passing along Norman Street, Bridgeton, she tripped in a defect in the pavement and fell. In falling she twisted her right ankle, which became swollen, but did not become discoloured; and strained her left side and her back. She was early pregnant, according to her story, and the fate of this pregnancy worried her very considerably. Since her accident her medical attendant had seen her on three occasions. She was confined to her bed until the Wednesday prior to my visit, that is to say twenty three days. The ankle was considerably better, but she complained of backache, peculiar crampy pains in the lower abdomen, and headache.

Examination. There was nothing abnormal to be found in the right ankle, and examination of the back/

back showed neither discolouration nor bruising. Pressure over the lumbar muscles and the left lower side of the abdomen produced complaint of pain.

Patient's obstetric history was as follows:-

She had had three children, the eldest being six, the youngest, now deceased, having been born in July of 1922. This child died in September 1923, and had been breast fed to the time of its death, an unusually long period. During that breast feeding patient had not menstruated, but her periods returned in October, when she had a discharge of blood lasting seven days. Again in early November she had a period. Its exact date she could not recall, nor could she recall the number of days which normally elapsed between her periods. She complained of some morning sickness, but there had been no bleeding per vaginam since her fall. She did not feel any movement.

In view of this history, I thought it desirable to examine patient internally. I therefore arranged for her mother to attend and, in her presence, made the examination. My findings were as follows:-

The uterus was small, and apparently not pregnant. It was in the position known as anteflexion and was displaced forward and to the right side. Behind the uterus and to the left, lying in the Pouch of Douglas, was a resistant mass, irregularly rounded, painful on pressure, and rather difficult to define, on account of the way in which patient resisted the examination./

examination. This resistance was in no way intentional, and resulted I am sure from patient's highly strung condition, coupled with the discomfort of the examination. Patient was pallid, appeared extremely anaemic, generally run down, and emaciated.

As the result of my examination, I arrived at the conclusion that patient suffered from a tumour of the adnexa. What that tumour was, I was not prepared to say without further full investigation. I was inclined to consider that it was quite probably a pregnancy in the left fallopian tube, and meeting such a tumour in hospital practice or in private practice, one would immediately operate. I explained the position to claimant, and considered it my duty to notify her medical advisor, of my finding. With him I had been repeatedly in communication, but he was very awkwardly placed, in that claimant's husband refused to permit his wife to enter a Hospital for operative treatment. If this was an extra-uterine pregnancy, the consequences to patient might be very severe, in fact might prove fatal.

Whatever the condition, it was not one which had arisen since the accident, though it might be one upon which such a fall might produce important changes. I did not think it possible to express any more definite opinion, prior to operation, which I considered was an urgent necessity in this case. I suggested that this case be carefully observed, and that should fatal results ensue, the Corporation should take steps to have the/

the internal genitalia examined post-mortem.

25th March, 1924.

In extension of my communication of 23rd January, 1924, I beg to report the further progress in the case of Mrs. J. McQ. of 43 A. Street, Bridgeton.

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Her condition was, generally speaking, better than it had been at the time of my first examination. Since that examination, she had not had any haemorrhage per vaginam, and her pain had been less severe.

Internal examination revealed the swelling described in my last report, which appeared, if anything, somewhat larger, while the uterus seemed slightly softer than on the previous occasion, and could be appreciated as being enlarged. On Wednesday, the 6th of February, I assisted Dr. D. S. in the operation necessary in Mrs. McQ's case. Afforded the opportunity of examining her under chloroform, when all resistance was of course overcome, I found it necessary to amend my view regarding her pregnancy. The uterus was early pregnant, the age of that pregnancy being probably two months. The abdomen was opened in the mid line and immediately there was exposed to view a spherical tumour, about the size of a large grape fruit. This tumour of the right ovary completely filled the Pouch of Douglas, displacing the uterus to the right. It was heavy, and the pedicle by which it was/

was attached was twisted through three complete turns. There were no adhesions and its removal was perfectly simple. The ovary of the opposite side was somewhat enlarged and oedematous, but as it contained the corpus luteum of pregnancy, removal of it would have produced abortion. The wound was closed in the usual way and patient returned to the Ward.

The interference had produced so little shock that patient carried her pregnancy, and did not suggest at any time the possibility of having a miscarriage. On February 19th, however, her convalescence was interrupted. Quite suddenly she commenced to spit and vomit free, bright coloured blood. This continued throughout a few hours that day at intervals, and she was given the usual restful, sedative treatment, employed in such cases.

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Thereafter patient's condition improved considerably, and on her discharge from the Samaritan Hospital, her pregnancy was still uninvolved and she was, everything considered, remarkably well.

As the result of my further investigation of this case, I formed this final opinion:-

1. Patient at the time of my first examination must have been early pregnant, probably about six weeks. It was not surprising that I did not suspect this on the occasion of my first examination, more particularly when the uterine condition was somewhat overshadowed by the presence of this large/

large tumour in the immediate vicinity.

2. The tumour which was removed by operation was of the type described as a dermoid cyst of the ovary. This type of growth could not possibly result from injury, and had probably been in claimant's pelvis for a long period.

3. The twisting of the pedicle of this cyst was a condition very frequently found in growths of this kind, its extreme prevalence being due to the considerable weight of such tumours and to their anatomical relationship. Twisting, might of course, be produced by a fall, but in this case the complete twisting had not been sufficient to obstruct the blood supply to the tumour, as was seen from Dr. McI's report, which said, "No gross circulatory disturbance or "evidence of infection of the tumour is seen". We could therefore definitely assert that the tumour in no way retrogressed, as the result of patient's accident.

4. The pregnancy was not interrupted either by the accident or by the operation, and any disturbance therein later appearing would be a thing apart from the accident.

5. The haemoptysis appearing on February 19th, was the result of early pulmonary tuberculosis, which of course the accident could not cause, and the delay from 18th December till 19th February suggested/

suggested very definitely to me that the accident in no way aggravated any lung condition then present.

6. The presence of an early tuberculosis and pregnancy, raised the debatable question as to the advisability of interrupting such a pregnancy in the mother's interests, or the leaving of it to proceed, in order to get a living child. This was a matter outwith our particular control, and was for the decision of the patient's medical advisor. He had been made conversant with the facts of this case, by communication from myself and from the House Surgeon at the Hospital.

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This case is reported very fully in view of the comparatively slight injury. Her minor accident led to the discovery of a twisted cyst which in turn might have caused serious trouble for its host, with the complication of her pregnancy or labour and afforded very sound grounds for a totally unjustifiable claim for compensation.

Alleged Uterine Displacement.

G 19. Mrs. A. C. or S., aet. 31 years, on 29/2/24, fell in a hole in the pavement, sustaining general injuries. In her complaints she said she felt certain her "womb was put out of place".

She had been breast feeding a child and examination revealed a superinvoluted uterus in normal position.

Panniculitis: Malingering.

G 20. Mrs. J. B., aet. 38 years, on 3/3/24, tripped in a broken glass prism in the pavement, injuring her back and left arm.

Examined three weeks later, she complained of pain in the left upper arm, side, and the small of the back, in addition alleging that the debility left by a miscarriage three weeks prior to the accident, had been accentuated.

She was in every way a fit looking woman. There was no sign of injury nor a suggestion of debility. Her pain was due to generalised panniculitis.

Panniculitis: Alleged Abortion.

G 21. Mrs. C. or C., aet. 43 years, on 18/3/24, caught her foot in a hole in the street and fell, bruising her body generally.

Examined four weeks later, she complained of severe pains in her back and abdomen, and of having suffered severe uterine bleeding.

Her usual periods were of the 3/28 type and, for some months, had been irregular. At the time of her fall she was six weeks without a menstrual discharge. Fourteen days after the accident she had a haemorrhage of five days' duration. On examination I found a non-gravid multiparous uterus. Considering her age, the apparent proximity of the menopause and my findings, I could not accept her allegation that she had aborted. Her severe pain, in back and abdomen, was due to panniculitis of old standing.

External Haemorrhoids.

Malignant Abdomen: Malingering.

G 22.

Mrs. M. H., aet. 46 years, on 7/12/24, caught her foot in a hole in the kerbstone, and fell, sustaining injury to her back, breasts and abdomen.

Nine days later she complained of the following:-

1. Severe pain in the small of the back.
2. Pain in the right breast and abdomen.
3. Pain on movement of bowels, which, she said, had been very loose since her accident, the stools containing slimy material.

The presence of external haemorrhoids was quite sufficient to explain the pain she suffered when her bowels moved, while her abdominal condition suggested malignancy. Claimant exaggerated any pain she had, and in this way very considerably interfered with the medical examination, and left me unable to give any very full opinion.

There was no sign of recent injury, and I was satisfied that she was using long established pathology in an effort to establish a claim.

Delayed Menstruation following Trauma.
?Graafian Follicle Involvement.

G 23. Mrs. A. H., aet. 43 years, on 22/11/24, caught her foot in a grating and fell, injuring her right side and back.

Examined seven weeks later, she complained of pain on the right side of the small of the back, and of irregularity of the menstrual periods since the date of the accident.

Her menstrual period was due on 22/11/24, but was delayed until 29/12/24, then lasting for seven days, instead of her usual three days. Claimant was satisfied that she was not early pregnant. Bi-manual examination revealed an uterus enlarged by a degree of sub-involution.

Her bleeding was not a matter for serious worry, as menstrual irregularity was not an infrequent result of the shock of an injury, and invariably soon resumed its normal state. In her case, however, the injury plus the thought of the menstrual disturbance had been causative factors in producing a highly strung nervous condition.

This example shows a menstrual period delayed seven days by injury. This could follow the premature rupture of a Graafian Follicle , with a resultant early development of corpus luteum which, while it existed, would inhibit menstruation.

Traumatic Neurasthenia: Panniculitis.

G 24. Mrs. J. McK. (Vide case C 25).

G R O U P H.

INJURY, NEUROSIS AND THE MENOPAUSE.

Neurosis: Menopause.

H 1.

Mrs. J. S., aet. 48 years, on 26/2/22, tripped over a defective piece of paving, and injured her right thumb.

Examined on 18/3/22, two weeks and six days later, she complained of "flushings", and occasional "bad turns", which left her unconscious for a "whole "day at a time".

The only findings on examination were fine finger tremors and increase of knee jerks. Her condition was climacteric in origin.

Injury: Neurosis: Menopause.

H 2. Mrs. S., aet. 52 years, on 28/10/23, tripped on the pavement, injuring her left ankle, right shoulder and right elbow.

Examined on 4/11/23, one week later, there were still present swelling and discolouration of the involved areas. Her nervous system was considerably involved as indicated by her explosive manner with occasional bursts of hysterical weeping, marked finger tremors, and exaggerated knee jerks. The fact that she was at the climacteric was in great degree responsible for this marked nervous involvement following comparatively slight trauma.

Advent of the Menopause: Nervous Manifestations.

H 3.

Mrs. McC. or B., aet. 46 years, on 7/10/24, tripped over a block of wood some eighteen inches square, sustaining injuries to her right leg and right hand, with shock to her nervous system.

She was examined on 14/4/25, twenty seven weeks later.

While I was interviewing claimant, she displayed certain general nervous manifestations, and at one point completely broke down and cried. The nervous condition could be explained by the fact that claimant had very distinct flushings, and was on the threshold of the menopause.

Haemorrhage: Menopause: Neurosis.

H 4. Mrs. W. (Vide Case C 23).

Metrorrhagia Two Days after a Fall.

Menopause Established.

H 5.

Mrs. H. M. (Vide Case C 26).

BIBLIOGRAPHY AND REFERENCES.

1. Deuteronomy, XXIV, i.

2. Newell, Caesarean Section, Gynaecological and Obstetrical Monographs, 1921, p.2.

3. Cornarius. Hippocrates. 1545, p.4.

4. Caspar, Guy and Ferrier, Glaister, etc.

5. Sir John Collie, Douglas Knocker, etc.

6. Collie, Malingering, 1913, p. 37.

7. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 71.

8. Collie, Malingering, 1913, pp. 55-56.

9. Jardine, Clinical Obstetrics, Ed. III, p. 20.

10. Munro Kerr and Haig Ferguson, Combined Textbook of Obstetrics and Gynaecology, 1923, p. 150.

11. Williams, Obstetrics, 1917, p. 211.

12. De Lee, Principles and Practice of Obstetrics, Ed. III, p. 116.

13. Dr. David Shannon's wards, Samaritan Hospital, Glasgow, 1923.

14. Williams, Obstetrics, 1917, p. 205.

15. Dr. A. W. Russell's wards, Glasgow Maternity Hospital, 1920.

16. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 425.

17. Leishman, System of Midwifery, 1888, Vol. I. p. 428.

18./

18. Cameron, S. J., Glasgow Manual of Obstetrics, 1924, p. 47.

19. Taylor, Principles and Practice of Medical Jurisprudence, 1910, Vol. II. p. 70.

20. Tidy, Forensic Medicine, p. 128.

21. Case Mrs. T. Glasgow Maternity Hospital Dispensary, 1920.

22. G. R. M. H. Dispensary, 1922.

23. G. R. M. H. Dispensary, 1923.

24. Munro Kerr, Operative Midwifery, Ed. III, p. 614.

25. Jardine, Clinical Obstetrics, Ed. III, p. 222.

26. Leishman, System of Midwifery, 1888, Vol. I, p. 428.

27. Etudé medico legal sur l'Avortement, quoted from Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 402.

28. Case A (2), 12, Appendix.

29. Smellie, Midwifery (Sydenham Edition), Vol. II, case 78, p. 124.

30. Cameron, S. J., Manual of Gynaecology, Ed. II, p. 78.

31. Blair Bell, Principles of Gynaecology, Ed. III, p. 275.

32. Munro Kerr, Clinical Gynaecology, Ed. I, pp. 66-67.

33./

33. Frankl, lectures on Gynaecological Pathology, Vienna, 1923.

34. Kerr, Douglas, British Medical Journal, 6/12/1921.

35. De Lee, Principles and Practice of Obstetrics, Ed. III, p. 450.

36. Knocker, Accidents in their Medico-Legal Aspect, p. 513.

37. Case A (3), 9. Appendix.

38. Case E. 5. Appendix.

39. Munro Kerr and Haig Ferguson, Combined Textbook of Obstetrics and Gynaecology, 1924, p. 224.

40. Cases E. 2, 4, 5. Appendix.

41. Case E. 5.

42. Williams, Obstetrics, 1917, p. 154.

43. Ibidem, p. 154.

44. Ibidem, p. 155.

45. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 103.

46. Williams, Obstetrics, 1917, p. 155.

47. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 120.

48. Medical Jurisprudence Department, University of Glasgow, 1922.

49. Munro Kerr, Operative Obstetrics, Ed. III, p. 691.

50. Norris and Dickenson, American Textbook of Obstetrics, 1898, Vol. I, p. 360.

51. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 478.

52. Ibidem, p. 479.

53, Jardine, Clinical Obstetrics, Ed. III. p. 631.

54. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 479.

55. Smith, Surgery, Gynaecology and Obstetrics, 1913, 17, p. 346.

56. Ehrenfest, Birth Injuries to the Child, Gynaecological and Obstetrical Pathology, 1922, p. 195.

57. Leishman, System of Midwifery, Vol. I, p. 428.

58. Satanowsky, Journal American Medical Association, 1920, T 4, p. 212; quoted from Ehrenfest, p. 184.

59. Ehrenfest, Birth Injuries to the Child, Gynaecological and Obstetrical Monographs, 1922, p. 184.

60. Dr. David Shannon, Samaritan Hospital, Glasgow.

61. Dr. W. F. McIntyre, do.

62. Frank, Gynaecological Pathology, Gynaecological and Obstetrical Monographs, 1922, p. 104.

63. Leutralbl. f Gynak. 1913, 4, p. 131, quoted from Frank, Gynaecological Pathology, p. 103.

64./

64. Anspach, Gynaecology, 1921, p. 169.

65. Munro Kerr, Clinical Gynaecology, 1922, p. 283.

66. Knocker, Accidents in their Medico-Legal Aspect, p. 366.

67. Quoted from Frank, Gynaecological Pathology, 1922, p. 105.

68. Collie, Malingering, 1913, p. 191.

69. Garrigues, Diseases of Women, 1900, p. 282.

70. Kelly, Medical Gynaecology, 1908, p. 493.

71. Glaister, Medical Jurisprudence and Toxicology, Ed. IV, p. 428.

72. Taylor, Principles and Practice of Medical Jurisprudence, 1910, Vol. II, p. 70.

73. Stark, Journal of Obstetrics and Gynaecology, 1911, Vol. II, p. 258.

74. Quoted from Frank, Gynaecological Pathology, 1922, p. 327.

75. Cameron, S. J., Manual of Gynaecology, 1919, p. 505.

76. Berkeley and Bonney, Guide to Gynaecology, 1919, p. 434.

77. Munro Kerr, Clinical Gynaecology, 1922, p. 491.

78. Frank, Gynaecological Pathology, 1922, p. 367.

79. Quoted from above, p. 367.

80. Munro Kerr and Haig Ferguson, Combined Textbook of Obstetrics and Gynaecology, 1924, p. 50.

81./

81. Frankl, lecture on Gynaecological Pathology, Vienna, 1922.

82.-86. Quoted from Frank, Gynaecological Pathology, 1922, p. 379.

87. Described to me by Frankl of Vienna, 1922, in response to personal enquiry.

88. Munro Kerr, Clinical Gynaecology, 1922, p. 195.

89. Cameron, S. J., Manual of Gynaecology, 1919, p. 248.

90. Knocker, Accidents in their Medico-Legal Aspect, p. 361.

91. Dr. David Shannon, Samaritan Hospital, Glasgow.

92. Dr. John Gardiner, do.

93. Dr. W. D. MacFarlane, do.

94. Berkeley and Bonney, Guide to Gynaecology, 1919, p. 434.

95. Jellett, Surgery, Gynaecology and Obstetrics, Vol. XXIX, 2, p. 117.

96. Kelly, Medical Gynaecology, 1908, p. 135.

97. Hendry, Transactions Glasgow Medico Chirurgical Society, Vol. XV, p. 146.

98. Kelly, Medical Gynaecology, 1908, p. 571.

99. Taylor, British Journal, 6/1/1923, p. 17.

100. Berkeley and Bonney, Guide to Gynaecology, p. 431.

101. Centralbl. f Gynak. 1892, 31,XVI, p. 614, quoted from Garrigues, Diseases of Women, 1900, p. 361.

102./

102. Rommel, Deuts. Zeitsch. f. Chir. 1902, 64, III, quoted from Frank, Gynaecological Pathology, 1922, p. 136.

103. Berkeley and Bonney, Guide to Gynaecology, p. 433.

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