

## RECENT ADVANCES IN OBSTETRICS AND GYNECOLOGY

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It has been said and repeated over and over again that "there is nothing new under the sun," and so it seems to be, with what appear to be the recent discoveries and advances in this particular field. There have been some re-discoveries of old principles and re-application of these principles to modern obstetrics and gynecological surgery. There has been the application of relatively new things in the field of general medicine and surgery to this particular specialized field. There has been, too, the popularization of methods which have been preached and advanced by men of other years, yes, even of other generations, so that they are in common use today, whereas, five years ago they were considered either obsolete or the use of them, by a few scattered individuals, as the first signs of senility or psychosis. Indeed, there are not only a few if any new discoveries in this field, but in some instances a few steps "backwards" may be interpreted as a distinct advance. And I refer particularly to the discontinuance of the promiscuous use of the heterogenous gonadotropic hormone preparations clinically for their supposed beneficial effect upon the human ovary, as regards the stimulation of an abnormally functioning or a hypofunctioning ovary, as far as ovulation or the restoration of normal cyclic metabolism is concerned (1). A very few years ago these substances, particularly the equine gonadotropins and their use was reported with great enthusiasm as a distinct advance in the field of gynecological endocrinology. The use of these substances may cause far greater harm than any temporary good. They are still promoted by some commercial institutions and are still used by some inexperienced clinicians, but their large scale use has, in all medical centers, long since been dropped.

However, there has been some advance in the management of functional irregularities of uterine bleeding. It has been conclusively shown that the use of Vitamin B complex used without any specific endocrine therapy will bring about a cure in a large percentage of instances. It is interesting to note that some years ago, before the advent of specific endocrines for the management of this type of case, the treatment of the anemia, which was associated with profuse menstrual bleeding, had a beneficial effect, and this was particularly true in those cases in which the anemia was treated with crude liver extract. As the liver extract was purified more and more it was found that the beneficial effect diminished, in fact, it was almost negligible insofar as the menstrual function was concerned. It was also found that a fat soluble by-product of the purification of liver extract seemed to contain a factor which also had a beneficial effect upon menstrual dysfunction, and especially upon a profuse menstruation. It was felt that this was the substance responsible for the change brought about by the use of crude liver extract. However, it is our experience that Vitamin B complex produces much better effect than this so-called antimenorrhagic factor derived from the liver. It might then not be too far fetched to suppose that part of the beneficial effect attributed to the liver extract could have been due to an increased intake of the Vitamin B complex. Vitamin B complex in this particular aspect has been used alone or can be used only as an adjunct to the standard attack, that is the use of thyroid substance, attention to diet, exercise, and the like.

In the field of cancer control generally, and especially in the detection of early cancer in the so-called inaccessible organs and with particular reference to the educational campaign there has been a very great step forward in the early detection of cancer of the cervix. This has been championed by Dr. MacFarlane and others in Philadelphia (2) and more recently by a Chicago group (3). Their work

is worthy of report here. They undertook to determine the value of periodic pelvic examinations for the detection of cancer of the cervix in an early and curable stage and in the detection of inflammatory lesions of the cervix which may predispose to cancer. By means of appeal to patients, women's clubs, nurses' auxiliaries, social service agencies and the public at large through the press, 1,319 volunteers were found. All were presumed to be well. They volunteered to come for examination twice a year for five years as a contribution to medical science. The examination, intentionally, was kept so simple that it could be duplicated by any physician and consisted of a careful bimanual examination and a careful inspection of the cervix in a good light. Up to May 15, 1944, 9,111 pelvic examinations had been made. In the first examination of these volunteers, early cancer of the cervix was discovered three times. The fact that these three cancers of the cervix were discovered in areas of papillary erosion and not in healthy non-inflammatory cervixes was significant and lends great support to the theory that cancer can develop in these so-called areas of epithelial unrest. At the Chicago Clinic, of the first 600 patients examined, ten were found to have cancer of the cervix. Erosions of the cervix were found in 75 cases, with treatment advised, and two cancers were found elsewhere in the female generative tract. The calling attention of these facts to the medical profession and to the public at large may result in the distinct advance of cancer control in regard to the female genitalia, but the real advance will only be made when the laity and the profession are taught that early uterine cancer is curable; that time is important; that hormones do not cure all gynecological disorders; that menstrual irregularities during the menopause are not normal; that irregular vaginal bleeding at any age may indicate early carcinomatous changes, or that unexplained vaginal bleeding, especially post-menstrual bleeding, can be caused by cancer and does not always result from endocrine deficiency, fibroids and the like, although they may be associated with them, and that vaginal discharge in adults may be an early sign of a malignant condition. In regard to the treatment of cancer of the cervix, it is a well known fact that it has always been generally unsatisfactory, even in early tumors. The original Wertheim operation for carcinoma of the cervix as practiced, perhaps before the advent of what we may consider now newer surgical technique and post-operative care, carried with it too high a mortality rate. Its favor gave way to radiation therapy entirely in many clinics and in fact the surgical treatment of cancer of the cervix has been until recently frowned upon by many. As the actual matter of fact, the result of the radiation treatment of cancer of the cervix has actually been no more satisfactory, except that the initial operative mortality was extremely low, but in those individuals who are not cured, the mortality rate from the cancer was still 100 per cent. There has been a constant search, of course, for the ideal method of treatment. Taussig brought forward, several years ago, the combination of irradiation with radical dissection of the lymphatics draining the cervix. By this combination therapy, he felt that his results were better. More recently there has been restated the argument for surgical treatment of cancer of the cervix, especially by Dr. Meigs of Boston (4). He has combined the original Wertheim radical excision of the internal female genital organs with the pelvic operation for excision of the lymphatics. Meigs has reported an astounding survival rate of 96.3 per cent in cases in which there was no lymph node involvement by this operation and a corrected survival rate of 87.7 per cent of all cases. These are undoubtedly by far the best results obtained by radical operation for cancer of the cervix.

Recently reported (5) has been the extremely high incident of all types of congenital anomalies, probably most frequently ocular and cardiac defects in babies born of mothers who has contracted rubella or German measles during the early months of their pregnancy. It is generally conceded that 100 per cent of mothers who contracted rubella the first two months of pregnancy will give

birth to infants with some form of congenital anomaly, and about 50 per cent of mothers who contract rubella in the third month have abnormal babies. It is considered by some a very definite indication of therapeutic abortion if the mother has contracted rubella during the first two months of pregnancy. Also very definitely indicated, is the avoidance of contact of women in early pregnancy with known cases of German measles. The use of immune globulin for the protection of women in early pregnancy, who have been exposed to rubella, has been advocated.

Early postoperative ambulation, as we use it today and as it is being practiced more and more, is most certainly a distinct advance in the care of surgical patients and especially in respect to abdominal surgery. The reduction of postoperative complications and a much earlier feeling of well-being by the patient are distinct advantages. The incidence of postoperative thrombophlebitis, which is especially prone to follow all types of pelvic surgery, and the incidence of pulmonary embolus, has been greatly reduced by ambulation. Abdominal distention, ileus and troublesome gas pains are also greatly reduced by early ambulation. Pulmonary complications, such as atelectasis, pneumonia, etc., are rarely seen where early ambulation is practiced. Not too long ago patients were kept in bed as long as twenty-one days following a hysterectomy. It is now practiced here and in many clinics to get the patient out of bed, or at least up on the edge of the bed, on the day of operation and to gradually increase their time up daily thereafter so that most of these individuals are ready to leave the hospital within seven to ten days.

The newer forms of chemotherapy, sulfonamides and penicillin and its related compounds have reduced the mortality rate and the long time morbidity rate of the one time dreaded child-bed fever to almost nothing. The same may be said in regards to the reduction of the incidence of breast abscess in the puerperium. In addition to this, treatment of the acute pelvic inflammatory disease in the post-abortion state and that which is primarily due to gonorrhoea, with these drugs, has reduced remarkably the number of patients coming to surgery because of the sequelae of these infections. The resolution which is seen in some of these individuals with acute inflammatory disease of the pelvis is almost unbelievable, when they have been treated with these drugs, and especially the combination of the sulfonamides and penicillin.

Continuous caudal anesthesia has become quite popular in many clinics in the past five years and has been rather widely used. This is shown by the fact that over 100,000 deliveries with this method have already been recorded in the literature (6). This method is not, however, without danger and disadvantage. It is a highly specialized form of anesthesia and entails among its dangers, death. Briefly, it is a method devised to maintain continuously access to the caudal canal through which an anesthetic agent can be administered intermittently during labor and over a relatively long period of time. The chief advantage of continuous caudal anesthesia are the absence of depression in the baby, low toxicity to the mother and the complete absence of pain during the uterine contractions and delivery.

#### LITERATURE CITED

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