carriage of the growth by the blood-stream and the lymphatics. The patient died on Nov. 21st; unfortunately a necropsy was not obtained. There was little doubt, however, that there were numerous metastatic growths in the abdomen at least.

After the penis with the attached tumour had been carefully hardened for some weeks it was divided mesially, when the condition shown in Fig. 1 was presented. It will be

FIG. 1.



Mesial section of penis and attached tumour. UU, Urethra. G, Glans penis.

seen that even without microscopic examination the condition is evidently sarcoma. The tumour originates in the corpus cavernosum, extending from immediately behind the glans to rather more than an inch and a half towards the root of the penis. Both corpora cavernosa were almost equally involved. The direction of growth of the tumour is almost entirely outwards, the mass finally coming to present the appearance as shown, where the prepuce appears to be

FIG. 2.



Photo-micrograph of the primary growth. A points to areas of inflammatory deposit. (\times 80 diameters.)

the part which is the seat of the tumour. Another interesting feature is that at no time was there the slightest interference with the structure or function of the urethra; the urethral canal is indicated in the figure by a half cylinder of plasticine, showing as a dark rod-like mass. Considering the size of the growth, the limited area of the corpora cavernosa involved is striking.

Fig. 2 shows a photo-micrograph of the primary growth, which was kindly taken for me by Dr. E. J. Spitta. The field selected is near the surface, and shows the stretched and thinned-out epithelium covering the growth, with consequent obliteration of the papillæ. The magnification is 80 diameters. The picture is that of a spindle-celled sarcoma, with the usual interlacing of the bundles. To all appearance there is no stroma whatever. At two parts in

the figure there are small aggregations of inflammatory cells; these were entirely absent in the central portions. The appearances in the case of the sections from the inguinal mass were exactly similar, with the addition of hæmorrhage and necrosis at parts, so there was nothing to be gained by having another photograph taken of this secondary deposit.

Alike in the history, course, termination, and histological picture the present case is typical of sarcoma. In most, if not all, of the cases previously recorded there were deviations in some direction. In Webber's recent case, for instance, there was purulent urethral discharge with pain on micturition, and the sections showed "a fibrous tissue network with wide irregular spaces filled with large round and oval cells." In some of the other cases the cells are also described as being round in character. No photographs are given in cases which have been recorded previously.

As to the ultimate origin of the cells from which the growth originated, it is impossible to speak with certainty. They may have arisen from: (1) the endothelium of the vessels of the corpora cavernosa (Kaufmann's endothelioma vasculare); (2) the endothelial lining of the lymphatics of the same structures; and (3) from the connective tissue cells of the inter-sinusoidal stroma. At no part was the epithelium involved in the growth.

It is not at all unlikely that we shall find, as time goes on and the routine histological examination of every piece of tissue removed from the body becomes general, that sarcoma of the penis is not so very rare as present statistics would indicate.⁹ Brighton.

A CASE OF ANTERIOR DISLOCATION OF THE SEMILUNAR CARPAL BONE.

BY W. ROWLEY BRISTOW, M.B., B.S. LOND., F.R.C.S. ENG.

THE patient, aged 48, fell down two stairs on Dec. 13th, 1910, bruising his side, damaging his left wrist, and cutting his head. He was concussed by the fall, and remained unconscious for about three-quarters of an hour. On recovering consciousness he had no notion of the exact method of falling, and did not know whether the wrist was in a position of extension or of flexion. His head condition and bruised side rapidly recovered, but the wrist remained swollen, painful, and with marked limitation of movement. An X ray examination was made, but no fracture was discovered, and the case was regarded as one of a severe sprain of the wrist. Massage and movements were tried, but these caused considerable pain and produced no beneficial result.

I first saw the patient seven weeks after the accident. The left wrist was thickened, and there was a prominence just on the carpal side of the radio-carpal joint and deep to the flexor tendons. There was well-marked synovitis of the flexor tendon sheaths. This part of the wrist was tender on pressure. The styloid processes of the radius and ulna were normally placed, but the palm appeared to be shortened when compared to that of the opposite side. There was no tenderness or swelling in the anatomical snuff-box to indicate fracture of the scaphoid. The movement at the wrist and mid-carpal joints was markedly restricted. Flexion was almost *nil*, extension was limited to a few degrees of movement, and abduction and adduction of the hand were limited, although to a less extent. On attempting any forcible movement great pain was experienced, and also a tingling of the fingers over the median nerve area. The grip with the left hand was very poor, and there was

⁹ Additional references:-Hektoen and Reisman: A Text-book of Pathology, 1901, p. 1012 D.; THE LANCET, March 21st, 1885; Nov. 23rd, 1889 (this refers to Fenwick's case, ut supra); very marked wasting of all the muscles of the forearm. These muscles at once went into spasm on attempting forcible movement of the joint.

An X ray examination by Dr. A. D. Reid showed clearly an anterior dislocation of the semilunar bone. (Figs. 1 and 2.) There was no fracture of the scaphoid. The position of the displaced semilunar was such that the facet for articulation with the radius looked directly backwards, and the concave

FIG. 1.



Skiagram of antero-posterior view showing displaced semilunar bone.

FIG. 2.



Skiagram of lateral view showing displaced semilunar bone. Sc, Head of scaphoid. Sl, Semilunar. OM, Os magnum.

facet for the os magnum directly forwards. The head of the scaphoid was partially dislocated forward, superposing the top of the semilunar in the skiagram.

Treatment.—Operation on Feb. 14th, 1911, under ethyl chloride and ether. Under the anæsthetic no further movement was possible. Attempted reduction was not successful. When the muscles were relaxed under the anæsthetic the obstruction to the joint movement was obviously bony. An incision 2 inches long was made immediately to the ulnar side of the palmaris longus tendon; this tendon and the median nerve were retracted outwards and other flexor tendons inwards. The semilunar bone was found lying between the flexor longus pollicis and the flexor profundus digitorum, with the concave articular facet for the os magnum looking directly forwards—the position which the skiagram had previously shown the bone to occupy. The semilunar had come forward through the capsule of the





Skiagram showing antero-posterior view after excision of semilunar bone.

FIG. 4.



 ${\bf Skiagram\ showing\ lateral\ view\ after\ excision\ of\ semilunar\ bone.}$

wrist-joint, which had completely closed behind it. The bone was lying free except for two strong ligaments holding it to the scaphoid on the radial side. These ligaments were divided and the semilunar was excised. The wound was closed with silkworm gut. After the operation the movement at the wrist-joint was quite free, and full flexion was possible. The wrist was bandaged up in a semi-flexed position.

On Feb 21st the stitches were removed. The wound healed by first intention. The muscles of the forearm were treated by the method of graduated contraction with an induced current¹ instead of by ordinary massage, and the wrist and mid-carpal joints were moved in the same way. The treatment was carried on for six weeks, the amount of movement being gradually increased. The patient resumed his work a fortnight after the bone had been excised. He was last seen on April 19th, when the movement at the joint was excellent; extension, abduction, and adduction were complete. Flexion was almost full, about 70°, showing that both the wrist and mid-carpal joints were functioning. The wrist-joint is strong and the patient is quite able to do anything with the hand, and suffers no ill-effects from the injury.

Remarks.—The dislocation of a single carpal bone is a somewhat rare occurrence. Codman and Chase² have collected 12 cases of dislocation of the semilunar bone, and in almost all of these cases there has been fracture of the scaphoid as well. In the only two cases in which this dislocation occurred, and in which the scaphoid was intact, the radius or ulna was fractured. In the present case, although a series of photographs and stereoscopic views were taken, there was no sign of fracture of the scaphoid or of the radius or ulna.

Harley street, W.

A CASE OF PLUS-PRESSURE ANÆSTHESIA FOR EXPLORATORY THORACOTOMY.

BY F. HERBERT WALLACE, F.R.C.S. EDIN.,

LATE SENIOR AN ÆSTHETIST TO THE PRINCE OF WALES'S GENERAL HOSPITAL, TOTTENHAM.

THE following case will, I think, prove of interest to readers of THE LANCET.

The patient, aged 23 years, was suffering from nonmalignant stricture of the cesophagus. For the purpose of performing an exploratory thoracotomy anæsthesia was brought about by ethyl-chloride followed by $CHOl_3$. A Skinner mask was first tried, but as there was some difficulty in retaining the tracheal tube in position tracheotomy was performed and a full-size Durham's tube was inserted and the anæsthetic administered through the tracheotomy tube by using the Junker's apparatus without any increased pressure, respiration taking place through the free tube. As soon as the pleural cavity was opened, 30 minutes after the commencement of the anæsthetic, the free air-way was gradually closed up, and air under pressure of 15 mm. of mercury was forced into the trachea. This pressure was found to be sufficient to keep the lungs distended well up to the thoracic wall. There was a certain amount of leakage about the tracheotomy wound and into the pharynx. The manometer registered 10 mm. of mercury at inspiration and 15 mm. at expiration. Continuous pressure was used. A corneal reflex was kept throughout the whole time of operation. The patient's pulse at the commencement of the increased pressure was 80 beats per minute, regular, and of good volume, the respirations being 18 per minute. The use of a lung retractor and manipulation caused the upper lobe to collapse, but this was quickly overcome when retraction ceased. After 15 minutes of pressure the leakage became more pronounced, and a face-piece was added to overcome the escape through the nose and mouth. After 25 minutes the patient began to get slightly cyanosed; the pulse-rate had increased, and the respirations were now 24 a Oxygen was allowed to run into the bag, and this minute. successfully combated the cyanosis. The regular movement of the diaphragm never ceased the whole time. The patient's pulse was getting more rapid and somewhat collapsible, 96 beats a minute. An injection of pituitary extract was given—10 c.c. of a 20 per cent. solu-tion; this considerably improved the volume, but did not lessen the number of beats. The upper lobe towards the end of the operation did not move so well as at first and appeared to be cedematous, but the lower lobe was not so affected. The lung, however, distended well into the wound. While the thorax was open the pulse-rate never reached 100 beats a minute, but did so during the closing While the thorax was open the pulse-rate never of the wound. At the finish of the operation, an hour and 15 minutes from the commencement of the anæsthetic, the patient had a good colour and the pulse was about 112, regular, and of good volume. There was, however, as

indicated by the pulse, severe shock in spite of special precautions taken both before and during the operation. The wound was closed as accurately as possible and an attempt was made to render it air-tight. Pressure was kept up until the dressings were on. Three drachms of chloroform were used and 5 cubic feet of oxygen. The patient came round from the anæsthetic when the bandages were being adjusted. I will briefly describe the apparatus used.

A foot-pump and cylinder of oxygen are coupled to a large and stout rubber gas-bag. A V-shaped junction then carries a Junker's apparatus on one arm, and the other links up again



A, Foot pump; B, oxygen cylinder; C, gas bag; D, Junker's inhaler; E, manometer; F, air-way; H, valve; G, delivery tube; S, screw regulating clips; K, spring clip. Dark tubing, ½-inch rubber; light tubing, ½-inch rubber.

with the efferent tube of the Junker. A manometer is also in the air-way and a free opening close to the delivery tube. Spring clips are placed on the air-way and the manometer tube and screw regulator clips on the afferent Junker tube and free air-way. A valve is in the efferent Junker tube to prevent the plus-pressure blowing the chloroform into the apparatus. The main tubing is half an inch and the Junker a quarter of an inch in diameter. The delivery tube may be either inserted into the trachea through the larynx and should be about three-quarters of the diameter of the trachea, or fitted in a tracheotomy tube. A mask may be used on the face with no outlet, in order to prevent the fall of air pressure through leakage into the pharynx. Pressure is obtained by the foot pump, and the amount of chloroform is regulated by the screw-clips. There is a certain amount of leakage round the tracheotomy wound or delivery tube, and the free tube should be slowly closed till the requisite pressure is obtained by manometer, or, what is more essential, till the lungs expand well up to the opening in the thoracic wall.

I am indebted to Mr. Edward Gillespie and to Mr. Walter Edmunds for permission to publish the notes of this case.

Upper Clapton-road, N.E.

INFARCT OF THE TRANSVERSE COLON. By H. T. GILLETT, M.D. LOND.

CASES of infarct of the large bowel are so rare that the following is worth placing on record.

The patient, a woman, aged 49 years, had been troubled with piles for some time, but was otherwise well, till she woke in the night of Dec. 18th, 1910, with severe sense of pain in the epigastrium and flatulence. She blamed the coccoa she had had for supper. On the 19th diarrhœa began and the pain in the abdomen increased. On the 20th the diarrhœa continued and there was nausea. Blood in the stools was first noticed in the afternoon. During the following night she had two actions of the bowels; both were practically pure blood, bright in colour, and only very little

¹ An account of this method will shortly be published. ² Annals of Surgery, 1905.