

two hours. She suffered much from vomiting after the operation, until she died of peritonitis on the seventh day. There was no post-mortem examination.

Remarks by Mr. MORRIS.—My experience of the surgical treatment of diseases of the liver has had reference to hydatid cysts, the abscesses which result from suppuration of hydatid cysts, idiopathic abscesses of the liver, and the abscesses which arise outside but in contact with the liver. Several years ago the practice adopted almost as routine was to tap the tumour with a large trocar and cannula, afterwards introducing a piece of drain tube through the cannula. But more recently this has been given up. During little more than twelve months I had to treat seven cases of hydatid disease of the liver. Of these seven cases, five were in women, two in men. Two cases were cured by simple tapping with the aspirator. In one case, in which two separate cysts were diagnosed, one of the cysts was cured by tapping and the other by free incision after suppuration. In two cases in which repeated tapplings failed, the cases were cured by incision; and two were treated by incision without any attempt to cure by tapping. Six of the patients recovered perfectly and easily; the seventh, a case of altogether exceptional character and severity, died (Case 4). It is of interest to note that in two cases second cysts were either formed or took on fresh growth at intervals of three years and two years and a quarter after the first cysts had been cured. In one of these there were found and treated two cysts at the first operation. The plan of treatment I now adopt for all ordinary cases of hydatid of the liver is first to try the effect of evacuating the fluid contents by the aspirator, and, if this fails after one or more repetitions, to cut down upon and expose the cyst, tap it, and, having removed the fluid part of its contents, to incise its walls and stitch their divided edges to the edges of the incision in the abdominal parietes. I do not first stitch the liver tissue over the cyst or the cyst wall to the parietal peritoneum, and subsequently open the cyst (although I have adopted this plan for abscesses), nor do I use any other kind of means to secure adhesions between the cyst wall and abdominal wall before operating. In no case of hydatid tumour of the liver which is detectable at the bedside in a person otherwise in fair health should I allow the patient to go without surgical treatment, because, though hydatid tumours will exist for years without causing trouble or giving rise to symptoms and subsequently dry up, none take this course after they have passed the size of an orange. When they have attained a size large enough to be recognised and to give rise to symptoms, they invariably go on growing, and generally end fatally if not cured by surgical means. In the slight operation of aspirating there are one or two small points to which I attach importance. First, when withdrawing the cannula, I take care to press back the abdominal parietes, and keep them in contact with the liver, so as to prevent the escape of any of the hydatid fluid into the peritoneal cavity. Secondly, I allow no manipulation of the abdomen immediately after puncturing, but I apply for three or four days a soft elastic compress of cotton wool over the cyst, which is retained by a bandage, not by strapping; strapping is less comfortable, and allows of no yielding to the respiratory movements or intestinal distension. Thirdly, it ought to be borne in mind that during the first week or ten days after the tapping there may be some return of the swelling, due, not to reaccumulation of hydatid fluid, but to inflammatory effusion around and within the cyst wall; so that it is not advisable to resort to a second aspiration of the cyst until these inflammatory products are absorbed—i.e., if the swelling is but moderate, not until a fortnight or three weeks have elapsed, and it has become clear that the tumour is again steadily increasing. I believe that by these means we may altogether avoid exciting peritonitis or suppuration of the cyst in cases suitable for tapping. The conditions under which suppuration is prone to follow tapping are just those in which tapping is inappropriate—namely, the presence of a large number of daughter cysts or the cysts of very great size. One important precaution is observed after laying open the cyst. It is—never to pull away any still adhering part of the parent cyst, but to leave it to loosen and be cast off. There is often a great temptation at the operation to remove large portions of partially adherent cyst wall, but it should be resisted for fear of inducing considerable, and may be even fatal, hæmorrhage.

ROYAL INFIRMARY, NEWCASTLE-ON-TYNE.

ACUTE NECROSIS OF THE PATELLA; REMOVAL OF THE PATELLA ANTISEPTICALLY; RECOVERY WITH A USEFUL JOINT; REMARKS.

(Under the care of Mr. F. PAGE.)

NECROSIS of the patella is certainly of very great rarity; it is not, however, so unusual to find it in a carious condition due to syphilitic affection. Erichsen¹ mentions two cases in which he found necrosis of this bone: in one case it was secondary to fracture; in the other, that of an elderly woman, it came on without any obvious external cause, and gradually extended until it implicated the joint; acute suppuration followed, and amputation of the thigh was performed. The case recorded by Mr. Dodd² was that of a female patient aged twenty-seven. The disease commenced acutely about nine months before he removed the bone. She could afterwards fully extend the limb and bend the knee to nearly a right angle. Her power of walking was unimpaired. For the notes of this case we are indebted to Mr. H. B. Angus, clinical clerk.

H. S.—, a labourer, aged twenty-six, was admitted on Nov. 1st, 1888, with a large collection of pus round about the right knee and extending for a considerable distance up the thigh. He did not know that he had received any injury, and attributed his condition to sleeping in wet clothes. Ten years ago an exfoliation had been removed from the outer side of the right femur a little above the joint. On Nov. 5th the abscess was opened and drained. It rapidly contracted, but sinuses formed over the patella, and through these the bone could be felt bare. On the 27th of the same month an incision was made across the knee as if for excision of the joint. The bursa was found to be much thickened and the patella extensively necrosed. There was no other disease. The bursa was dissected out and the whole of the patella removed. Repair went on rapidly and continuously without constitutional disturbance, and on Jan. 19th the patient walked out of the hospital, the knee, as a precaution, being fixed by a back splint and bandage.

Remarks by Mr. PAGE.—This man was shown at a meeting of the Northumberland and Durham Medical Society on Feb. 14th, when he walked without lameness or any kind of support up and down the room. The only inconvenience he experiences is a slight check on rising from a sitting to a standing position. In the year 1883 Mr. T. A. Dodd, senior assistant surgeon at the Royal Infirmary, Newcastle-on-Tyne, published a case of excision of the patella, and showed the patient at a meeting of the above-named Society, with a very useful limb. So far as I am aware, Mr. Dodd's was the first case of the kind recorded, and I have not seen any other published since. It is entirely due to the success that attended his operation that I was induced to adopt his procedure.

CROMER COTTAGE HOSPITAL.

CASES ILLUSTRATING THE TREATMENT OF UTERINE AND PERI-UTERINE DISEASE BY APOSTOLI'S METHOD; REMARKS.

(Under the care of Dr. McCLURE.)

THE electrical treatment of uterine and peri-uterine disease has within the last year been the subject of considerable discussion and criticism. As a contribution to the literature of the subject the following notes should be of some value, especially as considerable time has elapsed since the cessation of the treatment, and there has been no relapse, the patients in Cases 1 and 3 remaining quite well, and Case 3 in the same state as when treatment was discontinued. In a recent report on the subject³ of the electrical treatment of uterine fibroids, Apostoli states that he has employed it in 278 cases of fibroma, or uterine hypertrophy, necessitating altogether 4246 applications of the constant current, and that in 95 per cent. benefit had been acknowledged. The mortality from the treatment is practically *nil*. There are two methods of utilising electricity in the treatment of uterine diseases. In the

¹ Science and Art of Surgery, vol. ii., p. 303.

² THE LANCET, 1884, vol. i.

³ See Annual of the Univ. Med. Sc., vol. iv.

first, two electrodes are inserted into the tumour, and the direct electrolytic effect produced; in the second, the intensity of the current is localised within the uterus, with the view of acting on the lining membrane of the uterus and indirectly modifying the nutrition of the tumour. The positive pole is placed in the uterus when hæmorrhage or profuse discharge are accompaniments of the fibroid, because the negative tends to increase the bleeding. High intensities, 200 milliamperes or more, are used, and this strength made possible by the employment of large electrodes of pliable metal, sponge, or (as Dr. McClure used) potter's clay, over the abdomen. Many chronic inflammatory conditions of the uterus yield readily to this treatment.

CASE 1.—Mrs. M—, aged thirty-five; married eight years; no children. The patient was the subject of a bleeding myoma; uterus fixed; sound passing four inches. The hæmorrhage, pain, and almost constant nausea and sickness had persisted for a month under ordinary methods of treatment. The woman was blanched and seemed at death's door. On April 25th, 1888, she was admitted into the hospital, and a galvanic current of 60 milliamperes was passed for seven minutes; the positive (platinum) electrode in the uterus, and a large clay electrode attached to the negative, were almost covering the abdomen. After the first application the sickness and nausea quite ceased, and there was some diminution of the hæmorrhage and pain. The application was repeated two days after with a current strength of 100 milliamperes, resulting in a further diminution of hæmorrhage and pain, with marked improvement in the appetite and the general condition. A third application of 112 milliamperes was made four days after, with a further reduction of the hæmorrhage. As this was now no longer an urgent symptom, the resolvent action of the negative pole (intra-uterine) to act directly on the mass, and thereby produce absorption, seemed more indicated. Six applications were made at intervals of four days, for ten minutes, with a current strength of 120 milliamperes. The uterine discharge was now much lighter in colour, and all pressure symptoms most markedly diminished, the bowels acting naturally without pain; sleep and appetite good. The patient had been getting about for the previous fortnight, and had regained a fair measure of strength. As there was still some oozing from the uterus, a return was made to the positive intra-uterine application. After six such applications had been made, at intervals of about a week, the patient expressed herself as being quite well—better than she had been for some years. The uterus was now freely movable and much diminished in size. There had been a normal period, with very little pain, lasting five days. Since then (June 10th) she has remained quite well.

CASE 2.—J. G—, aged thirty-five, single, was the subject of parametritis of two years' standing, involving uterus and appendages. She had the look of extreme suffering, and said she was never free from pain, the attempt to raise her foot from the ground causing evidently much suffering; in walking, her feet were slid along the ground, her steps being very short. Two large nodulated masses could be felt externally, reaching well out of the pelvis. The uterus was firmly fixed, presenting a hard irregular mass in the vagina; the os could with difficulty be made out. The sound passed three inches and a half. Before resorting to the galvanic current in this case, faradism with Apostoli's fine coil and bipolar uterine electrode was used for the relief of the pain for five minutes with entire success, the relief lasting four or five hours. Three of these applications were made daily. On May 23rd the galvanic current was applied as in the previous case for five minutes, the negative pole being made intra-uterine. Only 30 milliamperes could be borne. These applications were made twice a week, and after the third she was decidedly freer from pain and tenderness. In all, six applications were made with the negative intra-uterine pole. The patient was able to walk about without pain, but there did not seem much sensible diminution of the tumour. By this time from 80 to 100 milliamperes could be borne. A negative puncture was now made into the most prominent part of the mass in the vagina on the left side, where it seemed softer; the trocar, insulated to a quarter of an inch, and a current of 60 milliamperes passed for three minutes; this caused considerable pain. Two more punctures were made at an interval of a week. After the last there was very considerable pain, persisting

for a day. A plug of iodoform gauze was inserted after each puncture and renewed the second day. There was each time some slight purulent discharge, and a distinct slough separated about the sixth day. The condition of matters within the vagina had decidedly improved. The cervix was now well defined, and the fullness, especially on the left side, very materially less. The positive intra-uterine electrode was used after this four times, at intervals of four or five days, with a current strength of 80 milliamperes. The tumour, as seen externally, was smaller and much less prominent from the vagina. The uterus was movable to a slight extent, and there was a well-defined fossa on each side of the cervix. The patient was discharged on Oct. 11th, on the whole very much better, and was very anxious to come back again for further treatment.

CASE 3.—Miss K—, aged twenty-five, single, was admitted on April 10th. This was a severe case of hysteria, ovarian pain, and tenderness, with amenorrhœa of six months' duration, most obstinate constipation, and a peculiar attack of faintness and dyspnoea, with sudden and great distension of the abdomen. Her mother stated that she had at one time absolutely eaten nothing for a fortnight, and that she had been ill over a year. She was well nourished, and had an excitable, nervous look. She complained of severe pain in both ovarian regions, and there seemed much tenderness. Faradism by the bipolar vaginal electrode was applied, and before the current had passed for five minutes she expressed herself as being free from pain, and deep pressure could be borne in both ovarian regions. The faradism was repeated eight times; besides, she had five applications of static electricity. At one time during her stay she had an almost typical attack of hystero-epilepsy. After a two months' residence in the hospital, she was discharged quite well, the catamenia having come on in the meantime. I have recently heard from her mother that she continues quite free from all pain and hysterical symptoms.

Remarks by Dr. MCCLURE.—In the first case the only other alternative in regard to treatment would have been removal of the appendages, or hysterectomy. I believe in electricity we possess quite as certain a means of controlling hæmorrhage, and in this case, if not of absolutely curing the patient, at least of getting rid of all troublesome symptoms. In the second case the patient was not a good subject, having had hæmoptysis, and the apex of one lung not being free from suspicion of disease; yet she was much benefited. The last patient presented the most severe manifestation of hysteria and ovarian neuralgia, lasting over a year and uninfluenced by ordinary treatment. Apostoli's methods, as I have seen them carried out in Paris, were strictly adhered to. The antiseptic douche was used both before and after each application.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Observation on Intestinal Surgery.—Pemphigus Vegetans.

AN ordinary meeting of this Society was held on March 12th; the President, Sir Edward Sieveking, was in the chair.

Mr. F. BOWREMAN JESSETT communicated a paper on the results obtained from an experimental investigation into a novel mode of operating. Certain operations on dogs had been conducted by Mr. Victor Horsley and himself, assisted by Dr. Dove. The operations performed were the following:—1. Gastro-enterostomy and jejuno-ileostomy by the method: Two plates of decalcified bone were prepared, each having a central oval opening and four perforations for sutures near the margin of that opening; sutures were passed through these perforations and fastened at the back. The operation was accomplished by making a longitudinal opening in the stomach and a corresponding opening in the jejunum as high as possible; a bone plate was slipped into each viscus, and the threads passed through all the coats of the stomach on the one hand and the jejunum on the other; the corresponding threads of either plate were then tied firmly, the knots being embedded between the peritoneal surface of the intestine and stomach; the parts were then dropped back into the abdomen and the parietal wound closed. Jejuno-