measured one inch and a half in length. The extension of the growth into the floor of the mouth was freely removed with scissors and cautery; two diseased glands lying beneath the jaw were dissected out. The patient was discharged on May 10th; the wound had healed, and no recurrence could be detected. Within a week of her discharge it was noticed that the tumour was recurring in the floor of the mouth, and when readmitted on May 28th there was an extensive fungating mass of growth filling the whole gap left by the last operation. On May 29th an incision was made along the posterior border of the ramus and the lower border of the body of the jaw. The bone was sawn through the socket of the left central incisor, and again through the ramus, and the loose pieces, together with the mass of growth between them, were removed. The external wound healed rapidly, and the patient was discharged on June 11th. For a month no signs of recurrence were detected, but a fortnight later extensive growth filled the floor of the mouth and spread forwards into the cheek and downwards into the neck. She died on Oct. 1st, seven months after the first operation. When last seen, three weeks before death, an enormous lobulated mass hung beneath the jaw on to the chest, and extended upwards into both cheeks.

Remarks by Mr. HEATH.—The foregoing are good examples of the endosteal and periosteal varieties of sarcoma as affecting the lower jaw. Being both in the early stage of the disease, there was no difficulty in differentiating them; but in advanced cases of large tumour it is often impossible to be sure of the original starting point. The endosteal case was diagnosed as probably myeloid, which is the common form of sarcoma in this position, but proved to be a small-celled sarcoma, with oval cells in large quantity and an abundant matrix undergoing slight ossification. In the subperiosteal case, on the contrary, the cells were large and mostly round and the matrix scanty, with no ossification. There was also a strong family history of new growth.

SAMARITAN HOSPITAL FOR WOMEN, BELFAST.

THREE CASES OF OPERATION FOR ABDOMINAL TUMOURS; REMARKS.

(Under the care of Dr. W. K. M'MORDIE.)

THE following is an interesting series of three cases of laparotomy for tumours of the ovary. In the first of these the case is interesting on account of the mental effect of the operation—that of insanity; an effect which is fortunately of rare occurrence after ovariectomy (though several instances are on record)¹ or in any other operation. Dr. Savage,² in his paper on *Insanity following the Use of Anæsthetics in Operations*, makes certain propositions. He says: "Any cause which will give rise to delirium may set up a more chronic form of mental disorder quite apart from any febrile disturbance. (a) The most common form of mental disorder is of the type of acute delirious mania; (b) though such a disorder is generally of a temporary character, it may pass into chronic weak-mindedness, or it may pass into (c) progressive dementia which cannot be distinguished from general paralysis of the insane." How far the administration of an anæsthetic predisposes to the occurrence of insanity it is difficult to say; severe mental disturbance has followed operations in which ether has been employed, as well as those in which chloroform was the agent used for the production of anæsthesia. Clevenger,³ who wrote on the subject of traumatic insanity, looking upon the symptoms produced as of a distinctive type, comes to this conclusion, amongst others, "that traumatism may act both as a predisposing and exciting cause, producing traumatic insanity by itself, but hereditary or other taint causes greater liability." It is important, in the investigation of these cases, to have on record the nature of the anæsthetic, the mode of administration, the quantity used, and the duration of the anæsthesia; also the predisposition or otherwise of the patient.

CASE 1. *Insanity following ovariectomy.*—J. L—, married, aged fifty-three, was on Feb. 18th sent by Mr. Andrew M'Connell of Belfast to the Samaritan Hospital to have an

ovarian tumour removed. At the time of her admission she measured forty-seven inches round the umbilicus. She had for a considerable time before her admission suffered from chronic bronchitis, and no doubt this was a predisposing cause of the congestion of the lungs which set in a few days after the operation.

A large cyst with small pedicle, no adhesions, and containing a dark treacle-like fluid, was removed, the operation being completed without the slightest trouble. The patient progressed without a bad symptom to the sixth day, when, the wound having healed, the sutures were removed. So far as the operation was concerned she seemed perfectly recovered. On the day following the removal of the sutures mental disturbance appeared, and she became so violent that it was necessary to physically restrain her. Dr. M'Mordie had the advantage of Mr. M'Connell's long experience of mental affections, who pronounced it a typical case of insanity following an operation. Symptoms of congestion of the lungs appeared, but these cleared off, and the woman was removed by her friends on March 8th, no improvement having taken place in the mental disturbance.

In the second case the cyst was very adherent, and Dr. M'Mordie found it necessary to drain it. The use of the glass drainage-tube was found satisfactory, and is generally in use. Pozzi⁴ has strongly advocated Mikulicz's method of capillary drainage by means of iodoform gauze in cases similar to the one which we record, but this method has not met with general acceptance, most operators preferring the use of the glass or indiarubber drainage-tubes. Terrillon⁵ has passed a long rubber tube, in cases similar to this, from the abdominal wound through the floor of the pelvis and out by the vagina, the lower end being left free in the vagina, with iodoform gauze packed loosely around it. This method is very dangerous, however, from the hæmorrhage which may be induced by wound of one of the pelvic vessels.

CASE 2. *Large adherent cyst of the broad ligament treated by drainage; recovery.*—Mrs. H—, aged forty, married, no family, was on May 29th sent by Mr. William Gordon, of Saintfield, county Down, as a private patient to the Samaritan Hospital to have an ovarian tumour removed. Assisted by Dr. Henry O'Neill and Dr. M'Kinney, Dr. M'Mordie made the usual incision, but could find no division between the abdominal wall and the cyst wall until he had cut into the cyst. A thin dark fluid flowed out. The opening into the cyst was enlarged sufficiently to admit the hand, and the cyst completely cleared out. The wall of the cyst was adherent to the abdominal wall on the right side and at the front. It was free towards the left. Inside the cyst towards the left side were three small cysts having very thick walls, and these were filled with a clear gelatinous fluid quite different from the fluid in the large cyst. The walls of these were freely cut away, care being taken not to open into the peritoneal cavity on the left side. The entire amount of fluid measured upwards of twenty quarts. The enormous cavity was freely washed out with a 1 per cent. solution of boracic acid. A glass tube was left in at the lower angle, and the cavity washed out twice daily. At the end of a week there was some sloughing from the smaller cysts and a very offensive smell with the discharge from the wound. This gradually disappeared, and the case made most satisfactory progress, the cavity gradually contracting until July 1st, when only fifteen ounces of fluid could be injected without returning by the side of the injecting pipe. The patient then returned home and placed herself under the care of her family physician, who continued the syringing until the cavity completely closed.

The third case, in which a tumour of the ovary developed, is of interest, as solid tumours of that organ are rare in proportion to the cystic growths. Small fibrous tumours are not, however, uncommon in the early stage of cystic disease.

CASE 3. *Rapidly growing fibro-cystic tumour of the right ovary; removal; recovery.*—L. G—, aged nineteen, single, a dressmaker, was sent by Mr. William Calwell Graham on Sept. 27th to the Samaritan Hospital. Her menstrual periods were regular up to the middle of April, and since then that function had entirely disappeared. About five weeks previously to her admission Mr. Graham was called to see her, the girl having suddenly complained of severe pain in the right ovarian region. She then for the first time

¹ Barwell, *Transac. of Clin. Soc.*, vol. xviii.

² *Brit. Med. Jour.*, vol. ii. 1887, p. 1199.

³ *Alienist and Neurologist*, July, 1888; also *Sajous*, vol. ii., c. 21

⁴ *Revue de Chirurgie*, April 10th, 1883; *Sajous*, vol. ii., f. 24.

⁵ *Annales de Gynécologie et Obstet.*, February, 1888

discovered an enlargement. Mr. Graham stated that this had rapidly increased from the time he first saw her up to the time of her admission as a hospital patient. The temperature varied from 99.6° in the morning to 101° in the evening. Pulse 120, weak and intermittent. The tumour felt solid, and was about the size of a pregnant uterus at full time. The diagnosis made was suppurating ovarian tumour. It turned out to be a fibro-cystic tumour of the right ovary, with very extensive adhesions to the abdominal wall at the right side and front. The omentum was pushed up above the tumour, and so puckered together that it was impossible to bring it down over the intestines. There was free bleeding from the broken-down adhesions, and it was necessary to keep in a drainage-tube for fifty-seven hours. The pulse immediately improved, and the temperature fell, the patient making an excellent recovery.

Remarks by Dr. M'MORDIE.—The above cases all present some features of special interest. The first case because of the sequel to what was otherwise a very simple and satisfactory case. The second case shows how an enormous sac may contract and become completely obliterated when strict antiseptic conditions are observed. Adherent cysts of the broad ligament are frequently found not to be satisfactory in their termination. My experience has been rather fortunate, this being the third case I have had of this description of tumour, and all have had a satisfactory termination. The third case is of interest from the high temperature and disordered pulse causing a difficulty in the diagnosis, and from the peculiar way in which the omentum was puckered, preventing it being brought down over the intestines.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Gummata of Pons Varolii.—*Diffuse Lipoma.*—*Adenomata of Os Uteri in Monkeys.*—*Ruptured Mitral Valve.*—*Saccular Aneurysmal Dilatation of Veins.*—*Unusual Bladder Growths.*

AN ordinary meeting of the Pathological Society was held on Dec. 3rd, the President, Dr. W. H. Dickinson, being in the chair.

Dr. ORMEROD read a case of *Gummata of the Pons Varolii*. The pons was cut into transverse slices, which showed numerous patches of disease, irregularly scattered through its substance. One of these occupied the position of the right sixth nucleus and its neighbourhood; it showed in the floor of the fourth ventricle as a distinct tumour in the place of the eminentia teres on that side. There was also noticed post mortem some general enlargement of the pons. Microscopically the tumours appeared to be gummata. The patient, who was under Dr. Gee, had left-sided numbness and motor paresis, followed by paralysis of the conjugate movements of the eyes to the right. Subsequently there was loss of all lateral movements of the eyes, paralysis of the lower face and of the muscles of articulation (simulating glosso-labio-pharyngeal palsy), general paralysis of the limbs, and deafness. There was no optic neuritis. He died twelve months from the onset. The points of interest were—(1) The absence of optic neuritis; (2) the correspondence of the early ocular symptoms with the lesion of the sixth nucleus; (3) the occurrence of gummata deep in the nerve substance, and their fatal issue in spite of antisyphilitic treatment.—Dr. DICKINSON said it was unusual to find gummata imbedded so deeply in the substance of the brain.—Dr. S. WEST inquired what evidence of syphilis there was other than this lesion.—Dr. ORMEROD, in reply, said that there was no other evidence of syphilis, and the patient denied a specific history.—The specimen was referred to the Morbid Growths Committee.

Mr. ROGER WILLIAMS showed a case of so-called *Diffuse Lipoma* or *Pseudo-lipoma*. The disease was at least as old as the habit of drinking large quantities of malt liquors and spirits, but Sir Benjamin Brodie first described it in 1846. The later literature of the subject was then referred to, and four new cases were related. The first occurred in a man aged forty, a carman, who was exhibited to the Society. He had enormous diffuse fatty swellings surrounding the whole of the neck, presenting pendulous masses in

front and behind. There were numerous pairs of fatty swellings down the whole length of the back on each side of the spine. Both loins, arms, elbows, forearms, and hands were similarly affected, as well as the lower part of the abdominal wall, both groins and the scrotum. The patient enjoyed good health, and the disease was of twelve years' duration. He had for many years indulged in beer and spirits. The other three cases were all adult males. In one the disease was similar, but of less extent, to that just described, and the patient was a barman, who was a great drinker of beer and spirits, and at his request the double chin was dissected away, with a good result. In the third case the swellings were at the back of the neck; and in the fourth at the lower part of the abdominal wall. He had collected and analysed thirty-one cases of this affection, and from these he concluded that prolonged indulgence in excessive quantities of alcohol was the chief factor in causing the disease in those predisposed to it, and that the condition was allied to excessive obesity rather than to any form of neoplasm. He then compared this affection with other diseases, remarking that undue accumulation of fat in the organism was either of hypertrophic or atrophic origin, and under the former he included obesity, diffuse lipoma, *pseudo-lipome sous-claviculaire* of Verneuil, sporadic cretinism, myxoedema, multiple lipomata, single acquired lipoma, and congenital lipoma. In the Bosjesmen enormous diffuse fatty masses were of normal occurrence in the gluteal and deltoid regions, especially in females; and other instances could be quoted showing that fat was normally distributed very unequally throughout the body, being collected in large masses in the physiological fat reservoirs. Analogous diseases were met with in the fibrous and osseous tissues—e.g., molluscum fibrosum and leontiasis ossea. In conclusion, he alluded to Broca's extraordinary cases of lipomatosis in which over 2000 fatty tumours were found.

Messrs. BLAND SUTTON and GORDON BRODIE made the following communication. For some time past they had been accumulating material for an investigation of cancer, especially in connexion with the uterus. It appeared that uterine cancer, though so very common in the human female, was rarely met with in other mammals, and was hardly known to veterinary surgeons. This induced them to commence the investigation by a study of the cervix uteri in monkeys, in order to ascertain if any anatomical conditions existed favouring the development of cancer in human females. A few years ago one of them exhibited before the Society a series of specimens demonstrating that monkeys (macaques and baboons) living in confinement in this country were liable to uterine flexions. Subsequently, evidence was given before the Gynæcological Society that macaques and baboons menstruated after the same fashion as women. The inquiry was followed up, and it was found that the menstrual period in these monkeys was very variable. In some it lasted a longer time than in others, whilst now and then a monkey appeared in an almost chronic state of menstruation. In many the menstrual period was followed by profuse leucorrhœa. Normally, the discharge of blood lasted from one to two days, but the redness of the less hairy parts persisted as long as a week. The average interval between each menstrual period was difficult to fix with accuracy, as it varied from a month to six weeks, or even longer; it was a safe inference, when a monkey menstruated two, three, or even four times a month, each attack lasting three or more days, followed by leucorrhœa, that the case was one of metrorrhagia. During the past summer a macaque was particularly watched; the metrorrhagia and leucorrhœa became so profuse as to render it unfit for exhibition, and, being of small money value, it was killed. The uterus was removed before the parts had lost their tissue life, and was found to be acutely retroflexed; the cervix enlarged, the os patulous, and a florid-looking mass projected from it, identical in appearance with what it was the fashion to call in gynæcology an erosion. After hardening the parts sections were prepared for the microscope in such a way as to include the os externum, the cervical canal, and portio vaginalis. Under a low power the mass protruding from the os, as well as a polypoid mass some distance up the canal, resembled a cervical adenoma, and in structure identical with the glandular tissue held to be characteristic of erosions in women, the acini being apparently lined by columnar epithelium. Many of the most typical acini were filled with a singular apparently homogeneous material. Under higher powers and careful illumi-