opinion that the general death-rate of perityphlitis is to be estimated at about 5 per cent.

If an abscess form, then the mortality may run up to 30 or 40 per cent. In the great majority of instances the subject of a perityphlitic abscess is, by reason of that abscess, cured of his trouble should he survive. The abscess may close and break out again, and this circumstance may be more than once repeated. A troublesome sinus may be left. The patient may succumb to the results of continued suppuration, but, so far as a definite attack of perityphlitis is concerned—as distinguished from mere abscess troubles—he is in most instances exempt. The risk of removing the appendix during the quiescent period—as first proposed by me in 1888—is in my experience less than 1 per cent., and I believe, therefore, that the danger of that operation is less than that of an ordinary attack. I believe that the majority of the attacks of perityphlitis are single, but it is scarcely possible to express in reliable figures the risk to which a patient is exposed of having other attacks after the first outbreak.

5. As regards the question of surgical treatment I have had no reason to alter the opinion expressed some years ago that in dealing with cases during an attack an operation is seldom called for before the fifth day. Terms too strong cannot be used to condemn the practice of immediate operation: by that I mean the exposing of the appendix as soon as the diagnosis has been made. There is no sound basis for this procedure in either the pathology or the clinical prospects of the affection. It is not to be disputed that a fatal attack may commence mildly, and that it is not possible to foretell the degree of an attack by its mode of onset. The course of perityphlitis is, however, not so erratic as some maintain, and careful observation of each movement of the disease is not an unreliable basis for treatment. It is true that some intense attacks end in death in forty-eight hours, but if the whole range of the disease be reviewed, it is safe to say, with precision of language, that these terrific phases of the malady are exceedingly rare on the one hand, and are not difficult to recognise on the other.

In such extreme examples an operation cannot be done too soon. The assurance that simple incision is attended by a death-rate of 18.18 per cent. is not an encouragement to operate as a matter of routine. I need not add that evidence or strong suspicion of the presence of pus indicates immediate interference, and a like course is clear should the swelling continue to increase with no abatement of the fever and other symptoms.

There are few inflammatory affections in which leeches act in a more remarkable manner than they do in perityphlitis. If five or six be applied early, as soon as the local manifestations are present, the effect is in many cases most satisfactory. In not a few instances in which operation has appeared imminent, it has been rendered unnecessary by leeching.

The bacterium coli commune—the most usual active organism in the production of perityphlitis—has peculiar pyogenic powers. Pus may, on the one hand, be produced in an incredibly short time, while, on the other hand, the inflammatory process may hold an indefinite position for many days, the swelling neither subsiding nor giving evidences of suppuration; and then when even so long a time as two weeks have elapsed the definite phenomena of abscess may come to the front. In these hesitating swellings leeches often act admirably. At least they give immediate relief, and the punctures do not compromise any future operation.

When an abscess is evident or suspected the locality of the incision must be determined by the area of dulness and of resistance. Should the wound be made so far to the inner side as to miss the collection and open the peritoneal cavity, that incision should be closed and a fresh incision made at a point where the evacuation of the pus within the enclosed area can be effected. The incision should be free; the abscess cavity is gently examined as to its position and extent, and information obtained as to the situation of diverticula. These diverticula can be cautiously opened up with the finger. No elaborate search should be made for the appendix. Such search means risk to the frail abscess wall, and to that often feeble barrier of adhesions which isolates the pus from the general peritoneal cavity. Continued trouble may follow from a retained concretion, and as such a substance is usually easily to be felt, it should be sought for and removed. Should

the diseased appendix actually present itself, it can be ligatured and taken away. The high mortality accredited to this operation depends, I cannot help thinking, upon a blind resolve to excise the vermiform process at all hazards. The operation is concerned with the evacuation of an abscess, and those cases do best in which the least is done, provided that a free evacuation of the pus has been secured. The cavity does not need to be squeezed; it does not call for irrigation nor for sponging out, and least of all for scraping. As for drainage, nothing answers better than the iodoform gauze drain properly cut and carefully introduced.

One of the strangest features in the literature of this disease is presented by the numerous methods described for opening the abscess and for removing the appendix. These are generally discussed with much apparent subtlety under the fascinating title of the "technique of the operation." We have Smith's method and Brown's method and Robinson's method, to say nothing of sundry combination or co-operative procedures such as Brown's incision in Smith's line, followed by Robinson's mode of suturing. If we can learn anything from the past history of surgery, this savours of a retrograde movement. The treatment of a diseased appendix involves no new surgical principle and calls for no laboured inventions. The treatment of the abscess is based upon those great general principles which underlie the treatment of all abscesses, and the removal of the little organ demands no departure from those accepted procedures which belong to the common lore of surgery.

CLINICAL REMARKS

ON

SOME INTERESTING PELVIC CASES.

By J. BLAND SUTTON, F.R.C.S.,

Surgeon to the Chelsea Hospital for Women, and Assistant Surgeon, Middlesex Hospital.

CASE I.—A LARGE MYOMA OF THE NECK OF THE UTERUS.
A MARRIED woman (sterile), 40 years of age, came under my care in the Chelsea Hospital for Women with a large uterine tumour reaching above the navel, and furnishing all the signs of a myoma. A portion of the tumour projected through the widely dilated mouth of the uterus into the vagina. This tumour had been growing many years, and had not caused trouble till the last few months, when several severe losses of blood gave her great alarm. After careful consideration of the case I attempted to remove this large tumour piecemeal through the vagina, hoping to avoid the more serious operation of hysterectomy. Many large pieces of the tumour were detached by means of scalpel and scissors, when it became clear that more radical measures were necessary. The patient was returned to bed in order to obtain her consent to hysterectomy. On recovering consciousness the patient began to bleed so furiously that she was returned to the theatre and the abdomen opened in the usual way. As the tumour could not be withdrawn through the incision, I split the capsule and shelled it out of its bed. The loose capsule was then surrounded with the wire of a *serre-naud*, and treated by the extraperitoneal method. Convalescence was quick and uneventful.

On examining the parts removed I found the body of the uterus, with the tubes and ovaries, natural in shape and size. The tumour was elliptical in shape, and weighed nearly 7 lbs. It had arisen in the cervical wall, and protruded into the cervical canal, dilating it in the manner represented in Fig. 1. Microscopically it presented the characters common to uterine myomata.

I subsequently examined the myomata contained in the metropolitan museums. There is a cervical myoma (Hunterian) almost as large as my specimen in the Museum of the Royal College of Surgeons, and an excellent example, shewn in section, in the Museum of St. Thomas's Hospital.

CASE II.—COMPLETE TUBAL ABORTION.

If anyone practically unacquainted with the remarkable properties of unstriped muscle were shown a foetus at term in the amnion and the uterus in which it developed an hour

after delivery, he would have his credulity sorely tried to be persuaded that the amnion and contents had been housed in the centre of that organ. I venture to make this observation because some thoughtful men, thoroughly familiar with the behaviour of the uterus, fail to comprehend that a similar state of things happens with the Fallopian tubes.

Fig. 1.—A large myoma (weighing nearly 7 lbs.) originating in the cervix, and exclusively occupying the cervical canal of the uterus.

In May I operated on a woman, aged 35, mother of ten children (the youngest aged 3 months), nearly moribund from internal bleeding. When the abdomen was opened, a very large quantity of free blood was evacuated, and on the right side a tubal mole was found, surrounded with clot. The left tube and ovary were of natural size, but the right tube was dilated to the thickness of the forefinger. It was removed with the ovary. The tubal walls were intact, but the abdominal ostium was widely dilated, and easily admitted the tip of my finger; the ovary contained a true corpus luteum (Fig. 2). The tube and ovary were placed in water, and as *rigor mortis* supervened the tube quickly contracted to nearly natural size.

In this we have an example of complete tubal abortion, and the tube after its abnormal labour contracted as firmly as the uterus does under similar circumstances. Cases of this kind have been reported, and the absence of a tear in the tubal wall has led the reporters to believe that they have had to deal with a primary peritoneal pregnancy.

In a period of four weeks I was forced, from the urgency of symptoms, to perform celiotomy for bleeding due to tubal pregnancy three times. The first case was a woman, aged 39, mother of twelve children, the last being twins; the second a woman, aged 25, married nine months, her first pregnancy being tubal; the third is the case related above. In each

instance the tubal mucous membrane was carefully submitted to microscopic examination, but no signs of salpingitis, recent or old, were detected. The first and second cases quickly recovered; the third, to my deep regret, died. When I first saw the patient she had so far recovered from the shock that I declined to operate, but in a few days recurrence of bleeding made interference imperative, and, under the domestic conditions of the patient, a serious and, as it proved, a fatal undertaking.

Fig. 2.—The Fallopian tube, ovary, and mole from a case of complete tubal abortion. The ovary contains a large corpus luteum.

CASE III.—GONORRHOEAL PERITONITIS.

There are many conjectures in medicine and surgery on which we base the treatment of important and serious conditions; yet when it becomes necessary to defend some of them, it is very difficult to adduce convincing evidence. Clinically, we talk of gonorrhoeal discharges, but until the specific micro-organism—the gonococcus—was detected, there was no absolute means of determining between a gonorrhoeal or a leucorrhoeal discharge.

It is established beyond any doubt that septic infection of the uterus may extend to the Fallopian tubes, and by extension set up peritonitis, which is sometimes rapidly fatal. Some physicians are still dubious whether gonorrhoea is capable of initiating fatal infection of the peritoneum. In January a girl, 18 years of age, was admitted into the Chelsea Hospital for Women. She had been grievously ill ten days with pain in the belly and fever. On admission, her belly was swollen, tympanitic, and very tender over the caecum; temperature 105° F., pulse 120 per minute. The signs generally pointed to trouble about the vermiform appendix, with general peritonitis.

Next day the girl's condition was desperate, and my colleagues thought it right to give her the advantage of surgery. An incision was made over the caecum and a quantity of gum-like fluid flowed out. The vermiform appendix was natural. On passing the hand into the pelvis, the recto-vaginal fossa was found to be filled with gummy fluid. The ovaries were large and succulent and the Fallopian tubes as thick as the thumb. On drawing the right tube into the wound, pus was found leaking from the ostium. This tube and ovary were removed. The left appendages were in a similar condition, and in order to remove them safely I made a small incision in the linea alba, immediately above the pubes. The glutinous fluid was thoroughly washed out of the pelvis with water at 110° F., and the pelvis drained with india-rubber tubing and the wounds closed in triple layers. The vulva was then ex-

mined, and purulent fluid was seen issuing from the vagina. She made a straightforward convalescence.

Immediately the tubes were removed, Dr. Maclean, pathologist to the hospital, made preparations of the pus, and found myriads of micrococci and abundance of gonococci. Subsequent interrogation elicited from the girl that she was cognisant of a vaginal discharge for three months before she was suddenly seized with the acute abdominal pain which prostrated her.

It is of course uncommon for the surgeon to be called upon to operate in the early stages of gonorrhoeal peritonitis, and I take it that in this case the symptoms were exceptionally severe. At any rate, as far as my reading goes, I have not met with records which demonstrate so positively the presence of gonococci in relation with the pelvic peritoneum.

CASE IV.—ACUTE SEPTIC SALPINGITIS.

A married woman, aged 22 years, mother of one child, was sent into the Chelsea Hospital for Women suffering from very free uterine bleeding and a painful lump in the left iliac fossa. She had for three months noticed a profuse acrid vaginal discharge. On admission she was very ill, and her temperature was 102°, pulse 130, and an extremely tender swelling could be made out on each side of the uterus and filling the rectovaginal fossa. After resting a few days in bed the temperature subsided somewhat, and coeliotomy was performed. Two large sausage-shaped Fallopian tubes were disengaged from the pelvis and intestines to which they adhered. There was some oozing from the floor of the pelvis, which needed the use of a drainage tube for two days. Convalescence was rapid and uneventful.

The tubes were soft and succulent, and in the dilated parts easily accommodated my thumb. The mucous membrane was soft, shreddy, and infiltrated with blood; there was free blood within the tubes. The right tube presented a peculiar condition; its free end was expanded into a cyst, as large as a baby's fist, filled with gummy blood-stained fluid; the inner wall of the cyst was quite smooth, and at the spot where it became continuous with the tubal wall the fimbriae projected into it, as shown in Fig. 3.

fig. 3.—A Fallopian tube and ovary from a case of acute salpingitis. The tubal fimbriae project into a smooth-walled cyst of uncertain origin.

I have not seen a similar condition, nor can I venture on an explanation in regard to its mode of origin. The contents of the tubes were submitted at once to a bacteriological examination, and swarms of micrococci were found; in many places they were disposed in pairs, but we could not be sure they were the diplococci of gonorrhoea. Although the bacteriological evidence did not decisively prove that this extensive change in the tubes was due to the gonococcus, it clearly demonstrated that the lesions arose from septic infection, and the surroundings of the patient induced me to presume that a male urethral discharge was the source.

THE Public Health Committee of the Edinburgh Town Council have recommended that Dr. John Wyllie should be appointed to succeed Dr. Claud Muirhead as Consulting Physician to the Edinburgh City Hospital for Infectious Disease.

AN ADDRESS ON SOME ASPECTS OF DISEASES OF THE NERVOUS SYSTEM AND THEIR STUDY.

By W. R. GOWERS, M.D., F.R.S.

Delivered at the Inauguration of the First Session of Systematic Instruction at the National Hospital for the Paralysed and Epileptic as a recognised Medical School, October 5th, 1896.

[ABSTRACT.]

DR. GOWERS began by stating that the duty had been laid upon him of offering a cordial welcome to all who had come to make acquaintance with the hospital as a place of study, or to renew the acquaintance that had been made before. They were now beginning to use the vast educational capacities of the hospital. During the last nine years nearly 2,500 students and practitioners had attended the practice, and that not superficially, since the average times of attendance of each had been nearly ten. Such teaching had, of necessity, been merely clinical and casual. The hospital had now been recognised by the authorities as a place where fifth-years' students might pass part of their last year. This had entailed the addition of organised systematic teaching to that which had long been carried on there, and also the necessity of charging a small fee for the instruction, which would now be made much more complete.

PROPOSED ARRANGEMENTS.

In addition to the in-patient and out-patient practice (which has been declared by many students to afford a better opportunity than is to be found elsewhere in Europe for gaining familiarity with diseases of the nervous system), in addition to the clinical instruction as given heretofore in connection with these, the weekly clinical lectures would be continued in the spacious theatre, provided by the far-seeing liberality of the Board of Management. But further, systematic instruction would be given in such subjects as the investigation of symptoms, general and special, together with the anatomy and physiology, general and special, of the nerve centres needed to understand and interpret these symptoms. How much such special applied knowledge is needed many a student can testify.

Further, the need for the thorough knowledge of ocular symptoms, of the changes in the internal apparatus of the eye, of recognition, adequate and accurate, of ocular palsies, isolated and combined, and the various and significant alterations to be observed with the ophthalmoscope, would all be the subject of special instructions. The varied disturbances of hearing, and their relation to disease, would be considered, and so also would the very important symptoms presented by the throat, and especially by the larynx, which supplies some of the most important indications. In each special department the hospital was fortunate in the service of men of the highest eminence. Besides such special help, the use of electricity in diagnosis and treatment would be the subject of full and practical instruction by members of the staff; while for instruction in the pathology of the nervous system, general and special, there were facilities of an unusual character that should insure actual familiarity with the subject, even that of microscopic character, to every student.

The clinical clerkships open to the students, alike in the wards and the out-patient room (the lecturer observed), possess peculiar educational value, because the previous training undergone enables more responsibility to attach to them, and more to be learned by them, than at most hospitals. The investigation of the case, past and present, the record of the facts, and the subsequent consideration of them by the physician as well as of the reasons for the diagnosis reached, involve an education of peculiar value to the student in his last stage of singular value. The in-patient clerkships promote the profound study of disease in its varied relations, while those in the out-patient room develop the special value of this class of work, the doing what must be done in a limited space of time adequately and