posteriorly, the Fallopian tubes seem to form a boundary, in front of which is a region almost immune from the invasion of infective organisms and the sequela which follow them. Taking advantage of this observation, I have devised an operation which, so far as a limited experience goes, seems to solve the problem.

The broad ligament is put upon the stretch by pulling the Fallopian tube upwards, and the ovary is pulled away at right angles to it, so as to get an idea of the length of the ovarian mesentery. A pair of sharp-pointed scissors is now thrust through the broad ligament from behind forwards at a point corresponding to the junction of the middle with the outer third of the ligament, and 1 in. below the level of the lower margin of the Fallopian tube. The opening is then enlarged sufficiently to allow of the delivery of the ovary through it on to the anterior surface of the broad ligament. The ovarian pedicle is now attached to the borders of the incision in the broad ligament on its anterior aspect by two catgut retaining stitches, one on each side. By this means the ovary is securely fixed in its new position. The opening in the broad ligament is reduced in size by approximating the edges with catgut. It is thought important, however, not to constrict the ovarian pedicle unduly. Any raw surfaces on the posterior aspect of the broad ligaments are invaginated and stitched over as far as possible, so as to present a smooth peritoneal surface.

The following case is typical of those which have been operated upon according to the method just described.

The symptoms were pain and tenderness over both iliac regions, and pain in the sacral region. There was dysmenorrhoea of a severe character and dyspareunia. On examination the ovaries were found to be enlarged, prolapsed into Douglas's pouch, and adherent. Pressure upon these by the examining finger caused exquisite pain.

An operation was carried out substantially as described above. The ovaries were freed from dense adhesions, a well-marked cystic condition dealt with, and the operation otherwise completed as indicated above. During the five months which have elapsed since the operation, pain has been absent, and in every other respect the patient has enjoyed very good health.

An objection which could be urged against this operation is the possible effect of pregnancy upon the pedicle of the ovary. As the gravid uterus gradually expands, the ovarian pedicle might be injuriously affected. It was considered that any such risk would be obviated by making the incision in the ligament as far externally as the length of the ovarian pedicle will permit. In the first place, even in a uterus at full time, one finds, in cases of Caesarean section, for instance, that there is a quite definite amount of broad ligament left. In the second place, the gradual stretching which takes place would obviate any risk of strangulation or other injury to the pedicle.

The new position of the ovary facilitates the emptying of its veins, and to this is to be attributed in part the successful results obtained. If there be an associated condition of malposition of the uterus, such as retroflexion or prolapse, this, it will be understood, should be dealt with before finally closing the abdominal wound.

DR. LUDWIG MOND, who during his lifetime made many gifts to scientific institutions in this country, including in particular his foundation of the Davy-Faraday Laboratory in connexion with the Royal Institution, has bequeathed a sum of £50,000 free of duty to the Royal Society of London. The income derived from this bequest is to be employed in the endowment of research in natural science, more particularly, but not exclusively, in chemistry and physics, by providing awards for new discoveries and by giving pecuniary assistance, including scholarships, by supplying apparatus and appliances for laboratories and observatories, and by improving existing or erecting new laboratories and observatories, and in such other manner as the Royal Society may decide to be best calculated to promote scientific research. The society is also authorized to spend a part of the income in the publication and circulation of reports and papers communicated to it and in the preparation and publication of catalogues and indexes of scientific literature. Dr. Mond also bequeathed a similar sum to the University of Heidelberg for the endowment of research in natural science. He likewise bequeathed to the nation, under certain conditions, a number of pictures from his collection of early Italian masters. The bequests are subject to the life interest of his wife.

ECTOPIC FETATION: LAPAROTOMY: DIFFUSE PERITONITIS: RECOVERY.

BY

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THE following case presents several features of interest which render it worthy of notice:

The patient, aged 22, was first seen by Mr. Gardiner on October 5th, 1909, when the following history was obtained:

She was married on July 15th, 1909, and the mid-August menstrual period was quite usual in every respect. The next period, due about September 10th, was much less than usual, and towards the end of the month haemorrhage commenced again and continued up to October 5th in varying amounts.

The os uteri was not patulous, there was slight vaginal haemorrhage, and some tenderness to the right of the uterus on bimanual examination. A mixture containing ergot and morphine was prescribed.

On October 7th, the haemorrhage being rather increased, the vagina was packed with iodoform gauze in the morning. On removing the gauze on October 8th some shreds of mucous membrane apparently of decidua nature came away, and on bimanual examination the tenderness to the right of the uterus was marked, and a small rounded soft swelling was detected. On October 9th, in the morning, she was more comfortable, but in the evening pain returned on the right side of the pelvis, and Mr. Webber saw her with Mr. Gardiner at 10.30 p.m. At this time the pulse was 85 and the temperature 99° F. Vaginal examination disclosed nothing definite, the patient being in great pain, and satisfactory examination impossible.

At 11 p.m. the pulse had risen to 120, and the patient's condition had changed considerably. She was now blanched and collapsed.

It was decided to open the abdomen as soon as possible, but by the time instruments, dressings, nurse, and anaesthetist were obtained, and a table, etc., prepared, it was past midnight. The patient was pulseless when placed on the table, and 2 pints of saline solution were injected intravenously before commencing laparotomy. The ruptured right tubal gestation sac was found at once, clamped, and removed, and ligatures applied as quickly as possible. All effused blood and clots were sponged out, and the abdomen closed by mass sutures of salmon gut. By this time the radial pulse had again become imperceptible and the breathing very feeble. An attempt to infuse more saline solution failed; in neither arm could a vein be found of size sufficient to admit the cannula. Saline was therefore given by the rectum, and 2 pints were slowly run in and retained. Under this treatment, with strychnine injections in addition, and small doses of brandy by the mouth as soon as conscious, the patient rallied, and was left at 6 a.m. with a small, weak pulse of about 140. All day (October 10th) she remained on the operating table with its foot raised 2 ft.; at 7 p.m., the pulse being 120, she was lifted into bed. During the day 3 pints of saline solution were slowly absorbed by the rectum, and sips of hot water taken by the mouth.

On October 11th the patient began to suffer from hiccough, and by the afternoon vomiting of dark greenish-brown fluid commenced; the pulse was 130, temperature 100.6°, respirations 34, and abdominal tenderness and distension present. At 5 p.m. Mr. Gardiner administered A.C.E. mixture, and, two sutures being removed, a rubber drainage-tube was passed into Douglas's pouch, some iodoform gauze being packed down to the right of the uterus, as a certain amount of haemorrhage came by the side of the tube. She was now placed in the Fowler position, and inclined to the left side, and the saline again administered by the rectum, one pint being slowly run in at intervals of three hours. The result of these measures was free drainage from the pelvis, cessation of the vomiting, and fall of the temperature, so that on October 12th it was 99.2°, and the pulse 120; the abdomen was distended, some hiccough present, but no vomiting, and less abdominal pain. A soap and water enema produced a good result. On October 13th the hiccough ceased, and some albumen water and weak beef-broth were retained; a rectal enema gave a fair result, and the patient's general condition was much improved. On October 14th the gauze was removed under A.C.E. anaesthesia, the tube being left *in situ*. On October 16th it was necessary to remove some stitches on account of infection of the abdominal wall, and apply boracic fomentations. The patient began to take solid food on October 17th, and daily shortening of the tube was commenced. Menstruation reappeared on October 19th.

Remarks.

The points of interest in this case are:

1. The age of the patient, and the almost immediate supervention of the abnormal pregnancy on marriage. The gestation sac was the size of an ordinary walnut; the

ovum was unfortunately missed at the time of the operation, and the sac was empty on examination afterwards. Probably the gestation was of about five weeks' duration.

2. The satisfactory result of the adoption of the Fowler position, pelvic drainage, and absorption of saline solution by the rectum on the peritoneal infection.

A CASE OF RETAINED MENSES RELIEVED BY OPERATION.

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THERE are various sites in which the menses are retained—as, for instance, in the uterus, in a cul-de-sac between the os uteri and a part of the vagina; in the vagina as a whole, due to atresia; in one part of a double uterus; or in an imperforate second vagina. Of these I have only seen two examples; perhaps a third may be partially classed with them. When a student a young woman who desired to be married came to St. Bartholomew's Hospital with the vagina full of menstrual fluid, and no outlet for it. A powerfully built married woman consulted me for vaginismus, which had after marriage made her life miserable for years. A strong fleshy band as thick as my finger crossed the vagina, resting against the os uteri but not attached to it, and caused a certain amount of mechanical obstruction. I cut through and removed the band; in two or three weeks married life became and remained enjoyable, and pregnancy shortly after resulted. In the case described below, by the light of subsequent events I have no doubt that the cyst (so called) was a second vagina, running parallel originally with the patent one, without any outlet therefrom—hence the accumulation of menstrual fluid within it, whilst menstrual fluid discharged into the other vagina found a normal outlet. There was no doubt an imperfectly developed uterus also, having two outlets, one of which discharged into a patent vagina and one into an occluded vagina.

In 1898 a lady consulted me for symptoms of distress, not only during menstruation, but also for indefinite symptoms between the menstrual periods. On vaginal examination a large, irregular, boggy swelling was felt between the left vaginal wall and pelvic bones, pushing the sides of the vagina together, so as nearly to block it up. Well back at the roof of the vagina there was a pin-hole point, believed to be the external os of the uterus out of position. Above the pelvis no enlargement was felt. A specialist believed the swelling to be an ovarian tumour and advised its immediate removal. Though satisfied an operation was needed, I concluded that if the tumour were ovarian it differed from all others I had encountered.

On opening the abdomen a large, beefy-red mass was found in the left pelvis intersected with large blood vessels, and adjacent thereto an imperfectly developed bicornuous uterus. The appearance of the mass differed from anything I had seen before, and it was found difficult to understand its precise nature. An incision was made into the tumour, one horn of the uterus was removed, and the contents, which were of deep chocolate colour and very viscid, evacuated. The walls of the tumour were from $\frac{1}{2}$ in. to $\frac{3}{4}$ in. thick everywhere, and resembled thickened placental tissue. The tumour was stitched to the abdominal wall and a drainage tube inserted. The specialist diagnosed the case as one of impounded menstrual fluid in a cyst originating in a congenitally occluded tube.

It soon became clear that the operation would not give permanent relief. Proposals to reopen the cavity and apply acids, with the object of producing adhesions, were not approved by me, and the lady would not then entertain another operation.

After a time menstruation occurred through the sinus, as well as by the vagina. In due course there was also a purulent discharge through the sinus, and then the wound healed and remained sound for six months at a time, breaking down from time to time. After the wound closed pain in the left groin became worse and dullness, due to distension of the cyst, extended as high as the spleen, the abdomen remaining absolutely flat, and there being no fluctuation. In 1899 and 1902, after the wound had broken down, there was copious discharge of very fetid purulent material mingled with viscid, chocolate menstrual fluid. In 1902, the abdominal sinus being closed, there was a bulging tumour pressing down the roof of the vagina, with the same boggy feeling at first observed. A small opening formed through the roof of the vagina, not far from the imperfect os uteri. Through this there was a considerable daily discharge of viscid, inoffensive chocolate fluid, which, escaping at the most dependent part, gave great relief, until after some months this opening closed again.

Early in 1905 the lady began again to have pain, accompanied by vomiting and general malaise. In June there was dullness over the left abdomen, and no outlet in the vaginal roof. Life became a burden, and was almost reduced to lying down in the garden. In July she again consulted the same specialist and another doctor. Operative interference was suggested, but not accepted. In October she consulted me again, and I wrote a detailed account of past symptoms to Dr. Christopher Martin. Armed with these particulars, and an experience of a dozen cases more or less bearing on the case—less rather than more—an operation was suggested, which was readily assented to.

A general anaesthetic (ether) having been administered, the vagina was made as aseptic as possible, and a speculum inserted to expose the interior and keep its posterior wall from protruding forwards. A long director was then passed down the abdominal sinus, through the cavity of the tumour, to the roof of the vagina, and there held in position. An incision was made through the roof of the vagina into the cavity of the tumour; the incision was afterwards made more or less radiate, and the radiating tongues were everted and firmly stitched to the vaginal wall, care being taken also to stitch the margins of the cyst wall to the vagina proper. A hot solution of hydrogen peroxide was then run through the abdominal sinus and cavity of the tumour, which, emerging through the incision made by Dr. Martin, passed outwards through the vagina proper. The lady returned home in less than a fortnight very much relieved.

The ultimate permanent success of this operation depends entirely upon whether the artificial outlet made should in course of time contract and either become closed or be virtually closed to such an extent as again to permit the menses to be impounded. Four years have now elapsed; menstruation is fairly regular and rarely painful. She has learned to swim and to ride a bicycle, and sea-bathing has not been followed by ill effects. She walks three or four miles without discomfort, attends to household duties daily, runs about the house and garden, goes upstairs two steps at a time, does a little gardening, and feels such a delight in romping, after having been obliged to lie down or crawl so long, that she has a difficulty in keeping her movements within the bounds of prudence.

Assuming that the horn of the uterus removed at the first operation was the point of origin of the retained menses, the only explanation I can offer for a subsequent retention is that, although the stump was firmly ligatured, it probably sloughed, and thereafter permitted the menstrual flux from the other horn to escape into both the patent and the occluded vaginae.

If the true nature of the swelling could have been diagnosed in 1898, it is possible operative treatment of another kind, though attended with risk of severe septic infection, would have been suggested. However, between 1898 and 1905 a few specialists gained considerable experience of isolated cases of a similar nature, and on the whole I am inclined to think no other operation in 1898 would have been attended with more success than in this case, and that the signal success of the operation in 1905 was largely due to experience gained after 1898, and the clear history I was able to give Dr. Martin of antecedent circumstances, including a description of what was seen and imperfectly understood at the first operation—in other words, the success of the second operation was largely secured by the partial failure of the first.

At the invitation of the Argentine Republic a Pan-American Congress of Medicine and Hygiene will be held at Buenos Aires in May, 1910. The opening session will take place on May 25th. An exhibition of hygiene will be held in connexion with the congress.

The annual dinner of past and present students of the Royal London (Moorfields) Ophthalmic Hospital will be held at the Trocadero Restaurant on Wednesday, January 26th, under the Presidency of Mr. Edward Nettleship, Consulting Surgeon to the hospital. Tickets (10s. 6d., exclusive of wine) may be obtained from the Honorary Secretaries, Mr. Arnold Lawson, 12, Harley Street, W.; and Mr. J. Herbert Parsons, 54, Queen Anne Street, W.

A, Sinus in abdomen below umbilicus, down which director was passed to roof of vagina, and through which hydrogen peroxide gravitated; B, part of uterus capable of discharging contents into patent vagina; V, vagina with normal outlet; C, approximate position from which second horn of uterus was removed and stump ligatured; S, sac, which contained impounded menses, believed to be a second vagina with no outlet, and which was much nearer to point marked D prior to first operation, when it was pushed up and stitched to the abdominal wall; R, position of stellate or radiating incision, and everted ligatures of its margins, made at second operation.