the mere opening and manipulation of the peritoneum could induce an extension of inflammation from the ureter to the serous membrane. There seems to be no doubt that such an extension took place and caused the intestinal adhesions, the vermiform appendix being involved secondarily.

It is obvious that at the second operation a short-circuiting of the bowel would have rendered the third, fourth, and sixth operations unnecessary, and possibly the need for the nephrectomy would not have arisen, but if the adherent coils had not been separated a pus focus might have been left, and when the absence of any such condition was ascertained the patient, never strong, had become so feeble that the course adopted seemed the safest. Removal of the kidney was essential for health and comfort, so the development of the renal symptoms was not regretted after they had been successfully dealt with.

INVERSION OF THE UTERUS IN A NULLIPARA DUE TO A SUBMUCOUS FIBROMYOMA.

BY

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PENRITH.

THE following case being of a somewhat unusual nature, I have thought that a short statement of it might be of interest.

On February 5th I was called at midnight to see a farmer's daughter, a nullipara aged 45. All the appearances of a recent severe haemorrhage were present. A mass about 5 in. long, somewhat conical in shape, with a blunt apex and base towards the vagina, protruded from the vulva. Its lower part was quite smooth and pale red in colour, and its surface was shiny except in one or two places where there were linear excoriations up to about half an inch outside the vulva, where it abruptly became rough and shaggy, and almost black in colour. It was here covered with dark blood which slowly oozed from its surface, and was tightly constricted at the vaginal orifice. The bed and the patient's clothes were saturated with blood, as in an abortion. The pulse was 120, rather small, but steady; temperature 97°, respirations normal. The patient sweated, and was evidently suffering from shock. Thinking at first that it might be a cervical polypus protruding from the vagina and commencing to slough, I was, however, assured that nothing had projected externally until about one hour before I was summoned. On closer examination I discovered that the protruding mass was a sessile polypus attached to and occupying the whole fundus uteri, and that it had caused a complete inversion of the uterus. The dark, rough, shaggy mass was the fundus in a state of strangulation caused by the narrow vulval orifice, and I could distinguish the dimples indicating the uterine openings of the Fallopian tubes on each side, just inside the vagina. I had received no information as to the nature of the case I was called to see, so that I had no chloroform at hand; but as, fortunately, I had taken my surgical accident bag, I was provided with antiseptics. The patient's condition was very serious, so I decided to try to reduce the mass without an anaesthetic. I carefully cleansed the surrounding parts and the tumour, and grasped the fundus, which was hard and firm, close up to the vagina with my right hand, and then kept up a steady pressure, as in the reduction of a hernia, for about ten minutes, when I became sensible of a softening in its consistency. Maintaining this pressure, I now began to push the mass steadily inwards and slightly upwards until the whole fundus passed inside the vagina. The vulval orifice being so small, I could no longer keep up the pressure on the uterus, so I pressed the fibroid. When the apex of the tumour had reached the orifice, the whole mass suddenly reduced itself, and nothing could be felt in the vagina but the cervix uteri, with an external os which would just admit the tip of the index finger, and with nothing protruding. The whole process of reduction took only twenty minutes. The uterus could now be defined enlarged, as in the third month of pregnancy, and retroverted. The fundus, normal in its rounded contour, showed no signs of dimpling. I cleansed the vagina as well as I could under the circumstances, and gave the

patient one-sixth of a grain of heroin hypodermically. As no haemorrhage or pain ensued I was able to leave her one hour later. The subsequent history was uneventful; the temperature rose to 99° next day, and then fell gradually to normal; the pulse also by the second day fell to 80. On the third day an enema was given with a good result and no untoward symptoms. There has since only been a slight show daily, with no pain.

The history of the case is as follows: Until Christmas, 1914, the patient, who is a strong, healthy single woman, inclined to stontness, and engaged in farm work, had noticed nothing unusual. After Christmas, however, she suddenly began to have occasional rather severe losses at the periods, with more or less metrorrhagia, but no pain. These symptoms were ascribed to the coming of the menopause. At 4 p.m. on February 5th, after a particularly heavy day's work, pains in the back, with some bleeding, set in; which gradually became more severe, and extended all round, somewhat as in labour. At about 7 p.m. the patient first felt that something occupied the vagina. She did not like to say anything, however, but went to bed, and fell asleep for nearly two hours, when the pains became most intense, and the mass suddenly issued from the vagina, and then I was sent for, four miles from her home.

The unusual feature of this case is the inversion of the uterus in a nulliparous woman—a condition which is rarely mentioned in textbooks, and was no doubt produced by the efforts of the uterus to expel the polypus as a foreign body. Owing to its close attachment to the fundus, the tumour gradually produced a dimpling, this process extending *propter hoc et post hoc* until the uterus was completely inverted. I may add that I was rather surprised at the fairly easy way in which it was reduced, and at the quick and steady recovery from what must have been a severe shock, not to speak of the risk of uterine infection. I would also say that the patient, who dreads operation, so far cannot make up her mind to submit to the necessary surgical treatment for her cure.

ACUTE SEPTIC MENINGITIS DUE TO B. COLI FOLLOWING SKULL WOUND.

By C. E. H. MILNER, M.R.C.S., L.R.C.P.,

LIEUTENANT R.A.M.C.(T.).

THE following case has recently come under my care at the 4th London General Hospital, and in view of one or two unusual features in its etiology and progress I have thought it worth while to place it on record.

Lieutenant R. W. was wounded in the head on May 5th by splinters of a high explosive shell, and sustained a compound fracture of the right parietal bone. Three days later he was trephined in France. Fragments of broken bone were elevated and removed, the original skull wound was enlarged, and the dura opened and drained. He was placed on the danger list and his friends telegraphed for, and it is largely thanks to the accurate observations made by his brother, who went at once to Boulogne, that I have been able to piece together a continuous history.

With a single relapse on May 21st, when he was very drowsy all day and his temperature rose to 100° F., he recovered gradually, until on June 1st he was well enough to be brought to England. On admission to the 4th London General Hospital on June 2nd he had a narrow, horizontal, nearly healed wound 3 in. long, situated 1 in. above the right ear, and overlying a larger trephine wound measuring 3 in. by 1½ in., from which a slight amount of cerebrospinal fluid was escaping. He complained of some headache, which was attributed to the journey by sea and by train. Except for slight weakness of the muscles of the left side of the face (a symptom which had been present from the outset) all the motor functions were normal; the deep reflexes normal to brisk, and both plantars flexion. The optic discs were normal and the temperature 99.8° F. It fell at night to 98.6° F.

At 4 next morning he complained of violent headache, and the temperature had risen to 103° F. There was no rigidity of neck or back muscles; Kernig's sign was absent, and there was still a complete absence of localizing neurological symptoms. Lumbar puncture was performed,

and the cerebro-spinal fluid found to be under slightly increased pressure. Cytological and bacteriological examinations were carried out, with the following results:

There were 3,760 cells per cubic millimetre, of which 70 per cent. were polymorphonuclear leucocytes; colonies of pure *B. coli* were isolated, from which a vaccine was prepared. Urotropine, which had been administered from the outset in doses of 10 grains three times a day, was now increased to 20 grains every four hours.

For three days the temperature remained high, ranging from 101.2° to 103.2° F. But clinically the symptoms—more particularly the headaches—were greatly relieved by the lumbar puncture. The patient was never unconscious, though cerebation was markedly slow: beyond some venous engorgement there was no abnormality in the optic discs.

Autogenous vaccine was given on June 5th and June 7th, in doses of 12½ and 25 million. On June 8th the temperature fell in the morning to 98.2° F. for the first time. Since that date the improvement has been maintained without interruption, and the patient is now in every respect normal.

CONGENITAL HEREDITARY ABSENCE OF SOME OF THE DIGITAL PHALANGES.

BY

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THE following observations are taken from a patient who was confined some weeks ago with her third child at the Bagthorpe Infirmary.

The abnormality affects both hands. There is an absence of the proximal and distal interphalangeal joints of the little and ring fingers, and of the distal interphalangeal joints of the index and middle fingers, as shown by the photograph taken of both hands. The tips of the affected fingers are rounded off, without any indication of a nail, excepting a minute vestige on the left index finger. The thumb of each hand is quite normal in appearance. The patient has no difficulty in performing the ordinary movements of the hands, but complains of inability to knit. The accompanying drawings from radiograms taken by myself illustrate the condition described below. The larger represents the mother's hands, the smaller those of her third child. As is seen, the middle and terminal phalanges are absent in both the little and ring fingers.

Fig. 1.—Drawing from radiogram of mother's hands.

In the index and middle fingers, the middle phalanx is seen to be absent, and not the terminal phalanx, as might be expected from the appearance of the hand. The patient states that her grandmother was similarly affected, as were also her mother, brother, uncle, and two cousins.

The genealogical table is as follows:

The abnormality seems to affect the first two born in each family, irrespective of the sex, and is present at birth.

Fig. 2.—Sketch of mother's hands.

In the case of the above patient her third child (boy), although not by the same father, was similarly affected, as is shown in the accompanying drawing (Fig. 3). In addition to the deformity of the hands there is a peculiar malformation of the child's penis. I cannot ascertain whether any deformity of the penis was present in any of the other male children. The prepuce is unusually long, but the frenum is imperfectly developed. The glans is quite normal, but the terminal opening of the urethra is not quite central, lying nearer the corona glandis than usual.

Fig. 3.—Drawing from radiogram of child's hand.

On efforts of the child at micturition the prepuce in its lower part becomes distended, almost exceeding in size a grape, and by compressing this distended portion the urine could be expelled in a fine stream, the ballooned portion thus acting as a reservoir.

A fine catheter, if directed forwards, could be made to enter the urethra, whilst if directed downwards and forwards it would be passed into the cul-de-sac above described, thus indicating that the floor of the urethra was incomplete in its terminal portion (partial hypospadias), although to all external appearances it looked quite normal.

In order to stimulate the invention of methods for using alcohol for commercial purposes the Russian Government has resolved to offer for international competition a series of prizes amounting altogether to £67,500. The highest prizes (four ranging from £7,500 to £2,000) will be given for devices to utilize alcohol for internal combustion engines. Other prizes, ranging from £6,000 to £500, will be given for methods of using alcohol for lighting, heating, and in the preparation of various materials useful in industry.

At the annual meeting of the American Medical Association, held in June at Rochester, Minnesota, it was decided that the next session should be held in Washington in 1916. Dr. Robert G. Leconte, of Philadelphia, was elected president.