he said, were aggravated many times during the day and once or twice at night while asleep, by any sudden turning of the leg outwards. His troubles were annoying rather than disabling.

He had been examined with great thoroughness and treated at several hospitals in an endeavour to diagnose his condition, which was suspected to be obturator hernia, but clinical methods had failed to bring about an accurate diagnosis, and his symptoms were unrelieved.

I decided that the obturator foramen should be explored, and adopted the following method of approach as causing the least disturbance to tissues and structures.

An oblique incision was made parallel to and just above the inner end of Poupart's ligament, exposing the external abdominal ring and the attachment of the external oblique aponeurosis to Poupart's ligament. The aponeurosis was incised in the line of the skin incision and the upper part retracted. The spermatic cord was also drawn upwards out of the way and the external iliac vein and the femoral ring defined. With deep retractors the peritoneum was pushed upwards from the pubic bone, when, about one inch behind the femoral ring, could be seen and felt the obturator foramen, through which the obturator nerve disappeared into the thigh after running along the wall of the true pelvis in a conspicuous manner.

The sac of the hernia was drawn from the foramen without difficulty and its obliteration was assured by this approach.

The above method is eminently suited for this class of case, but would not be recommended for strangulated obturator hernia, because it could not be diagnosed clinically with certainty as the origin of the mischief. Such an abdominal catastrophe would call for laparotomy in order to elucidate and treat the cause.

PERFORATED DUODENAL ULCER IN A MAN OF 83: OPERATION: RECOVERY.

BY

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In each of the two successful cases of operation for perforated gastric ulcer recorded by Captain E. Huntley, R.A.M.C., in the JOURNAL of July 12th, the operation was performed within a few hours of the perforation, and he emphasizes the importance of operation at the earliest possible moment.

The following case was remarkable from the fact that the perforation occurred when the patient was more than 80 years of age, and I attribute the successful result mainly to the fact that I was able to see him soon after the occurrence, and operate within a few hours.

He was a fairly healthy old man and active for his years. On June 30th he was suddenly seized with very severe pain in the upper part of the abdomen, and vomited almost immediately, bringing up nearly two pints of fluid material. When I saw him, about 6 p.m., he was suffering great pain; the abdomen was very rigid but not much distended, and the liver dullness had not disappeared. I gave morphine gr. $\frac{1}{2}$ and arranged for his transfer to a nursing home.

On opening the abdomen at 9 p.m. only a few bubbles of gas escaped; there was a moderate amount of greenish fluid in the upper part of the abdomen, but no peritonitis. There was no fluid in the pouch of Douglas. A perforation was immediately evident on the anterior surface of the duodenum close to the pylorus. The edges were indurated, and apparently the ulcer was of some duration. It was closed with two layers of sutures, and posterior gastro-jejunostomy performed. A pint of food was introduced into the jejunum before the first row of sutures was completed. A drainage tube was left in the wound, extending to the site of the ulcer, but no other drainage seemed necessary. The tube was removed after forty-eight hours, and the patient made an uninterrupted recovery. I started feeding him with peptonized milk within twenty-four hours of the operation.

Captain Huntley mentions that in neither of his cases was irrigation of the abdomen performed, and expresses the opinion that in early cases irrigation may possibly do more harm than good. I would go much further than this. I believe that in no case, early or late, should the abdomen be irrigated, and that this applies to all forms of septic peritonitis.

In the early days of operation for perforations irrigation was the rule, but since it has become the general custom to mop out the superfluous fluid, drain the pouch of Douglas, and sit the patient up in the Fowler position, the prognosis has become far more favourable. This has been attributed to the shock, so called, of flushing the abdomen, to the diffusion of the septic material, etc.; but flushing the abdomen does not in itself cause any perceptible shock.

In cases of ruptured pregnant tubes the abdomen, which is full of blood, may be flushed out with large quantities of normal saline solution with only beneficial results.

I think the explanation is simple. With the onset of peritonitis an inflammatory reaction in the serous membrane is set up, the vessels are engorged, serum is poured out in quantities into the peritoneal cavity highly charged with leucocytes, which attack the deleterious organisms, and the result of the combat is the lymph and purulent fluid which are so evident. The osmotic current is from the circulation to the peritoneal cavity, and only to a moderate extent are toxins absorbed back into the circulation. But when we replace this fluid with normal saline we leave in the abdomen a large quantity of fluid highly charged with toxins which it has dissolved, and this fluid is rapidly absorbed into the circulation, carrying the toxins with it.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

ENLARGEMENT OF ADRENAL IN STARVATION.

WHILE working as a prisoner of war behind the German lines in a prisoners' hospital laager it fell to my lot to carry out several autopsies on British and allied soldiers who died in the laager. Many batches of prisoners arrived from neighbouring working parties, where they had been systematically underfed, and had been worked until they were physically prostrated. From each batch some members died a very short time after admission. I was greatly impressed, in carrying out autopsies on these emaciated cases, by the size of the adrenal glands. In a series of eight cases of death from underfeeding the adrenals were definitely enlarged, almost to half as large again as normal, and the enlargement seemed, from naked-eye appearance, to be mostly in the cortex. Unfortunately there were no facilities for microscopy.

It would appear that the adrenals had hypertrophied to counteract the low blood pressure produced through insufficient nourishment. Perhaps this observation may lead others who have occasion to examine *post mortem* cases of extreme emaciation to pay special attention to the adrenal glands.

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Captain R.A.M.C.

IODINE IN VARICELLA.

ONE of the worst effects of chicken-pox is the scarring, particularly on the face. These scars are invariably caused by the pocks becoming secondarily infected; irritation is set up, and the patient cannot refrain from scratching, with the result that a permanent scar is formed, and the course of the disease greatly prolonged.

For some time past I have made it a rule to treat all these cases with iodine. From the first I give instructions that every vesicle shall be painted twice, or at least once, a day with tincture of iodine, applied with a small camel-hair brush. The result fully justifies the slight trouble involved, for not only is secondary infection prevented, but (perhaps in consequence) the itching, which in some cases is so intolerable, is almost entirely prevented; the pocks heal more quickly; the duration of the disease, and so the infectious period, is materially shortened; and scarring is entirely absent if the treatment is conscientiously carried out.

I always advise that not more skin than possible be painted, only the vesicles themselves; I have not seen irritation set up even in cases with a large number of pocks.

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CHARLES CORBEN, M.D., F.R.C.S.E.

COLLOSOL MANGANESE IN ANAEMIA.

For the last two years I have been using injections of colloidal manganese (1.0 c.cm.) in cases of anaemia in which the patient had a definite intolerance of iron. The results have been exceedingly good and the improvement in the women's general health marked. In several of the cases I commenced the manganese treatment for the relief of boils from which the patient suffered, and found that as