intermissions, the longest period of freedom from pain being three to four weeks. The pain had been worse since January, 1905; and two weeks before admission to the hospital in April, so severe as to compel him to give up work. About six weeks before admission he had a sudden attack of faintness; the next day the motions were black and tarry. For some time he had taken nothing but milk and Benger's food. The pain was referred to the epigastrium, and occasionally extended round to the right scapular region. No vomiting. Physical examination gave negative results, and there was no tenderness on pressure over the duodenum. Examination of a test meal gave a good percentage of hydrochloric acid. During the month of April the patient was under the care of my colleague Dr. Bertrand Dawson, who made a diagnosis of "duodenal ulcer." Relief followed rest and dieting, but the pain returned soon after his discharge, and he was admitted under my care with a request from Dr. Dawson that I would consider the advisability of performing an exploratory gastrotomy.

Operation.—On June 6th, 1905. Median incision. The stomach, which was somewhat distended, was turned upwards and the transverse mesocolon divided. A horizontal incision sufficiently large to admit the whole hand was made in the posterior wall of the stomach. Nothing abnormal having been found on the cardiac side, the forefinger was passed through the pylorus, when a large ulcer was found occupying the whole of the posterior wall of the duodenum, its upper edge being about $\frac{1}{2}$ in. from the pylorus. The base of the ulcer was very soft, irregular, and ragged, and seemed to be partly formed by the eroded head of the pancreas. Part of the incision in the stomach was sewn up, the remainder being united to an opening in the jejunum in the usual way.

After-History.—The patient took the anaesthetic badly, and was very sick after the operation, but the subsequent course of the case was uninterrupted by any incident.

Reviewing these two cases after the nature of the disease has been made known the symptoms may appear fairly conclusive of duodenal ulcer, but the diagnosis was at best a conjecture. Both had dyspepsia, pain two to three hours after meals, and melaena, and both were males; but there was no point of deep tenderness over the region of the duodenum. The absence of haematemesis also favoured the diagnosis of duodenal ulcer. Vomiting was absent in the second case, and only occurred late in the first.

Obviously any operative procedure in cases such as these must include a preliminary examination of the stomach and pylorus, and in view of gastro-enterostomy being required, this I invariably do through the posterior wall of the stomach unless this step is contraindicated by adhesions.

Gastro-enterostomy for duodenal ulcer may be indicated, as in the cases above related, for irremediable and persistent pain and dyspepsia; for constriction, which was commencing in the first case; for recurring haemorrhage; or as a second step after closure of a perforated ulcer.

This operation will act in precisely the same manner as when performed for ulceration of the pylorus; that is, by setting at rest the affected portion of intestine and by freeing it from the passage of acid gastric contents, and, in the case of constriction, by permitting the stomach to empty itself.

Regarding the actual operation it is advisable to make the incision as low as possible in the posterior wall, in order to admit of good drainage; to leave no "slack" of jejunum; to employ anchoring stitches on the distal side to prevent kinking; and finally to stitch the edges of the opening in the transverse meso-colon to the posterior wall of the stomach.

After passing the finger or even the whole hand into the stomach some difficulty may be experienced in finding the pylorus. This arose in Case II. The hand passed up into the cardia, and on being carried to the right was prevented from reaching the pylorus by a vertical folding of the lesser curvature, running from before backwards, which had to be dipped under before the pylorus could be found.

ACUTE SALPINGITIS

CAUSED BY AN INFLAMED APPENDIX BURSTING INTO THE MOUTH OF THE FALLOPIAN TUBE.

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

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THE recognized complications of appendicitis are many and various; so are the routes by which an appendix-abscess finds a vent. This communication refers to a case in which an inflamed vermiform appendix perforated, and the inflammatory products were discharged into the right Fallopian tube through its coelomic ostium. In February, 1905, I saw, with Dr. R. Ironside, an unmarried lady, 30 years of age, suffering from pelvic pain accompanied with acute febrile signs clearly indicating the existence of acute inflammation. On careful examination a tender swelling was felt on the right side of

the uterus and we felt some difficulty in deciding whether it was a tubal swelling (acute salpingitis) or an abscess connected with the vermiform appendix.

A few days later an operation was performed. The abdomen being opened by a median subumbilical incision, the vermiform appendix could be seen adherent to the fimbriated end of the right Fallopian tube; the tube itself was distended and adherent to adjacent structures. I successfully excised the appendix, the tube, and ovary without disturbing their relationship (see Fig. 1). When the parts had been

Fig. 1.—An inflamed vermiform appendix adherent to the coelomic ostium of the right Fallopian tube.

carefully hardened I made a section through them, as shown in Fig. 2. The lumen of the tube was filled with pus; its coelomic ostium had been firmly occluded and the fimbriae were withdrawn into the lumen of the tube; a narrow channel led from the interior of the appendix through its wall, near the tip, directly into the lumen of the tube.

Fig. 2.—The parts represented in the preceding figure shown in section. The vermiform appendix has a perforation near its tip communicating with the lumen of the tube. The fimbriae curled up in the tube are well shown. The tube was distended with pus.

The course of events in this case seems clear. The appendix, as so often happens, occupied the true pelvis, its tip lying in contact with the tubal fimbriae. The appendix became the seat of inflammation which involved the Fallopian tube and led to occlusion (salpingitic) of its coelomic ostium; finally, the appendix perforated and the morbid matter inundated and distended the Fallopian tube. Adhesion between an inflamed vermiform appendix and the Fallopian tube is common, but this is the first example which has come under my observation in which perforation occurred directly into the mouth of the tube. The patient recovered without difficulty or drawback.

CASE OF CUTANEOUS ANTHRAX TREATED WITHOUT EXCISION WITH SOLAVO'S ANTI-ANTHRAX SERUM: RECOVERY.*

By WILLIAM MITCHELL, M.B., C.M. EDIN.

SINCE Dr. T. M. Legge, H.M. Medical Inspector of Factories, brought the subject of the serum treatment of anthrax in man before this Society last June there has been a small epidemic of anthrax in Bradford, and several opportunities of testing the value of this method of treatment have arisen.

As I have had the opportunity of using the serum on what, it appears, has been the third case in England, where it was

* Read before the Bradford Medico-Chirurgical Society.