no thickening of peritoneum over it. The rest of the small intestine was apparently healthy. The appendix was at first sight healthy. In the meso-appendix was a white patch of old lymph to which the cæcum was adherent. By transmitted light there were five concretions in the appendix. The spleen was large and multiply notched. The kidneys and liver showed fatty infiltration. The gall-bladder was normal.

The gastric ulcer, duodenal ulcer, and appendix were sent to the Clinical Investigation Department, Cambridge, and the following reports were received:—

“1. *Gastric ulcer*.—The ulcer was bounded by a soft rolled margin, which was slightly undermined. The base was soft and was not apparently composed of cicatricial tissue. Near the centre of the base were a small perforation and a small elevated slough. Microscopical appearances: Ulceration for the most part does not extend through the muscular layer but the latter is extensively infiltrated with inflammatory cells and exudation. The subserous layer shows similar signs of inflammation and the mucous membrane contains several small cysts full of inflammatory exudation. The ulcer appears to be of an acute origin. There seems to be an excess of fibrous tissue in the sub-mucous layer but I have been unable to find any evidence of chronic disease (R. D. Smedley).

2. *Duodenal ulcer*.—The ulcer is very similar in appearance to that of the gastric ulcer. The edges were thick, soft, and slightly undermined. In the central portion of the base of the ulcer were two small blood-vessels which had been exposed and opened as the result of the ulceration. Microscopic appearances: Ulceration has extended in places into the pancreas; in other parts the base is formed by the deeper layers of the muscular coat of the duodenum. At the edge of the ulcer the cells of the mucous membrane are swollen, degenerated, and stain badly. In the same region there are small collections of inflammatory cells. In other parts of the ulcer there is practically no evidence of inflammatory exudation, probably because the necrotic process was very rapid and possibly because the patient was in a very collapsed condition (R. D. Smedley).

3. *Appendix and mesentery*.—There is no evidence of inflammation either in the appendix or its mesentery. In the transverse section will be seen a concretion which consists of cell debris and is probably faecal in origin (R. D. Smedley).

The majority of the cells are lymphocytes but there are a few polymorphonuclear leucocytes in the mucous membrane which are probably due to irritation caused by the concretions. There is no sign of inflammation in the other coats of the appendix or its mesentery (Professor Woodhead). ”

This last was in reply to some question as to cell exudation round the concretion.

Here, then, is a case of much interest. Chronic gastric ulcer is amenable in many cases to purely medical treatment, and in cases where medicine fails operative measures seem to hold out very excellent chances of complete recovery. Acute gastric ulcer, non-perforating, also is curable by purely medical treatment, but since this is in a great measure a trial of patience both for the physician and the patient, such cases are very apt to drift into chronic ulceration.

Perforating gastric ulcer, if early diagnosis be made and operative treatment undertaken, has a very fair prognosis. Operative treatment generally consists in stitching up the perforation or excising the ulcer *in toto*. Moynihan¹ has recently insisted on the association of gastric and duodenal ulceration and in view of the successful results of gastro-enterostomy for gastric and duodenal ulceration it would seem advisable in cases of perforating gastric ulcer to stitch up or to excise the ulcer and then to perform gastro-enterostomy. If the case has been seen sufficiently early to allow of a hopeful prognosis the patient's condition should not, generally speaking, be so bad as to prevent the prolongation of the operation by adding to it gastro-enterostomy. Such an addition has proved exceedingly valuable in cases of partial excision of the stomach and pylorus for carcinoma in the hands of Poncet and Delobe.² The appendix was examined in this case in view of a paper recently published by Dr. Lediard and myself,³ but although clinically the tenderness of the appendical region suggested inflammatory

reaction the microscopic examination showed no signs of inflammation.

I am greatly indebted to Dr. Lediard for helping me in the case and for permission to use notes of the case after removal to the infirmary.

Carlisle.

A CASE OF ECTOPIC GESTATION WHICH APPARENTLY RUPTURED TWICE.¹

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A HINDUSTANI Mahomedan woman, about 35 years of age, who had been married 16 years, attended the out-patient department of the Eden Hospital for Women, Calcutta, on Oct. 4th, 1904, for severe pain in the lower abdomen and irregular menstruation. The following history was afterwards obtained from the patient with much difficulty, as she was a dull and stupid woman. About the end of September she suddenly experienced a severe pain in her lower abdomen, chiefly on the left side, shooting down the left thigh, which came on without any apparent cause. She felt faint and was unable to move on account of the severity of the pain, which was cramp-like in character. She was treated outside hospital by a native midwife but received little, if any, benefit. Menstruation had always been irregular since the birth of her last child seven years previously and often came on a fortnight late, usually lasted about five days, and was quite painless. Her last period was about the beginning of July and she saw nothing in August or September. She stated, however, that she did not believe she was pregnant. (It was afterwards ascertained from her friends that she had thought herself pregnant and had taken some medicine which she obtained from a native midwife at the end of September with the idea of bringing on her periods again.) In August she suffered from vomiting, more especially in the early morning, but also sometimes after taking food. About this time she noticed pain and fulness of the breasts which continued up to the time of her admission into hospital. The bowels were very constipated; micturition was normal. There had been a whitish vaginal discharge since the pain began. She had suffered from what was apparently syphilis about three years previously and had had fever off and on for about seven years. Since the pain in the lower abdomen began the fever had been rather worse. Otherwise her general health had been good. She had had three children, the last seven years previously and one abortion at the fourth month eight years previously.

On examination of the abdomen beyond tenderness and slight distension over the lower part nothing abnormal could be detected. It was resonant on percussion. Vaginal examination revealed some prolapse of the anterior vaginal wall, the uterus lying slightly anteverted and anteflexed, freely moveable, and somewhat enlarged (to about the size of five or six weeks pregnancy). There was nothing whatever abnormal to be made out on either side of, or behind, the uterus. The bowels were much loaded. The heart and the lungs were normal. The general condition of the patient was bad, the pulse being rather weak and rapid and the respirations being hurried. She was at once admitted as an in-patient and carefully watched. The bowels were freely opened with aperients and enemata and the patient was put on a nourishing diet and a little stimulant was given. She steadily improved from this time and appeared to become quite well. The temperature had varied between 97° and 99·4° F. during her stay in hospital and there was a white discharge from the vagina but no trace of blood. She was discharged on Oct. 13th and on examination then nothing could be felt in the abdomen. Per vaginam the condition was found much the same as on admission. The uterus was of about the same size; there seemed to be slight increased resistance to palpation in the *right* fornix but nothing definite was felt. On the left side and in Douglas's pouch nothing whatever abnormal could be detected. A soft rubber ring pessary was inserted to relieve the prolapse of the vaginal wall.

¹ THE LANCET, Feb. 11th, 1905, p. 340.

² Revue de Thérapeutique Médico-Chirurgicale, August 15th, 1905.

³ THE LANCET, Sept. 10th, 1904, p. 761.

¹ A paper communicated to the Obstetrical Society of London on Oct. 4th, 1905.

The patient was not seen again until the evening of Oct. 19th, when she again attended and the following further history was obtained: "She was quite well for two days after being discharged on Oct. 13th but on the third night, without any apparent exciting cause, she got severe pains in the lower abdomen on the left side and felt something give way. She became very faint, and stated that she actually fainted, and thought she was going to die. She could not bear to touch her abdomen nor to move in bed as the pain was so acute. She sent for a native midwife who told her she would soon get all right and gave her some country medicine to take internally and applied some remedy to the vagina. She got no relief from the treatment; the pain became worse and there was a feeling of heaviness in the vagina. There had been a slight discharge of white mucus stained with blood after the second attack of pain but no passage of a cast or anything of this nature. She also had great pain in passing urine."

On examination the abdomen was distended and very tender in its lower part. A tumour could be felt rising up out of the pelvis but its outline or relations could not be made out owing to the great tenderness. Per vaginam there was a fulness felt behind and on the left side but tenderness was so great that a satisfactory examination was impossible. Chloroform was therefore administered and a further examination was made. A smooth, rounded, regular tumour, dull on percussion, could now be distinctly made out, rising out of the pelvis rather more to the left than the right side, semi-cystic, and reaching about two inches above the pubes. There was no dulness in either flank. Per vaginam the uterus was lying forwards, being pushed to the front by a semi-cystic tumour lying behind and to the left of it, about the size of a large orange. The patient's general condition was rather bad but there were no signs of further hæmorrhage or other urgent symptoms, so it was decided to postpone operation until the following morning unless further complications supervened.

On Oct. 20th, under chloroform, the abdomen was opened by a three-inch incision in the median line, commencing about one inch below the umbilicus. On entering the peritoneal cavity the omentum was found to be extensively adherent in the pelvis; it was ligatured low down in nine sections, divided, and displaced upwards. On further exploration a collection of blood and blood clots was found on the left of the uterus, shut off from the general cavity by adhesions. The clots were rapidly cleared out with the hand and the pelvis was then flushed out with normal saline solution, all bleeding having seemingly stopped. The left Fallopian tube was found to be considerably distended at the uterine end; it was ligatured at this end and (after the infundibulo-pubic ligament had also been ligatured) removed, one or two small vessels in the cut broad ligament being afterwards separately tied. The ragged portions of the omentum adherent in the pelvis were easily detached and removed. The pelvis was carefully sponged out and then flushed again with normal saline solution. The right ovary, tube, and uterus were all found normal, except that the latter was a little enlarged. The left ovary could not be detected. The abdomen was closed with through-and-through silk-worm-gut sutures, and a dressing was applied.

The patient stood the operation well, but as the pulse was a little weak one-fifteenth of a grain of strychnine was given hypodermically. The stitches were removed on the tenth day, union being good. She was discharged on Nov. 21st, just a month after operation with the abdominal scar soundly healed. Per vaginam the uterus was found to be normal in size lying a little anteverted. There was some slight induration behind and on the left.

About eight ounces of blood clot and blood were removed in all, some of which appeared to be of older origin than the rest as it was partially organised. The tube on examination was found to be dilated to about the size of a large walnut at its uterine end, the outer end being apparently normal. On section there were extensive interstitial hæmorrhage into its walls and an organised clot, in one part of which was found what seemed to be an amniotic cavity, about one-half by three-sixteenths of an inch; no trace of a foetus could be detected either in the tube or in the blood clot removed, nor was there any trace of the left ovary in the parts removed.

I am indebted to Lieutenant-Colonel F. S. Peck, I.M.S. (for whom I was temporarily acting at the time), for his kind permission to publish the case; to Captain E. O. Thurston, I.M.S., resident surgeon of the Medical College Hospital,

for his valuable help and assistance before and at the operation; and to the clinical clerk, Miss Flora Singh, for her careful notes.

A microscopical examination of the specimen was kindly made for me by Captain Leonard Rogers, I.M.S., the acting professor of pathology at the Medical College, Calcutta, who has furnished the following report: "Microscopic section of ectopic gestation. A longitudinal section through the Fallopian tube shows from without inwards the wall of the tube, which merges into a thick layer of decidua membrane, which at one end of the section shows large blood-containing sinuses of the placenta. On the inside in places chorionic villi are seen projecting into the deeper layers. No ovarian tissue was found in the section."

I saw the patient again on Jan. 16th of this year. The scar was quite sound; the uterus was lying in normal position except for slight deviation to the left; it appeared quite moveable and no thickening could be felt anywhere.

The case seemed to me worthy of record from several points of view, as it illustrates the very vague and indefinite symptoms and signs that may occur in the rupture of a tubal gestation, as I think the after-history of the case clearly points to the conclusion that this had occurred when the patient was seen on the first occasion. The total absence of all the signs made the diagnosis very difficult. The general symptoms of the case undoubtedly pointed to some abdominal trouble, but the aspect of the patient was not that of internal hæmorrhage but more like peritonitis, and the remarkable way in which she recovered made the diagnosis still more puzzling. It would seem that the hæmorrhage on this first occasion must have been very slight and quickly checked, and probably a mild peritonitis may have arisen which set up the adhesions found at the operation. The second rupture would probably have set up more severe hæmorrhage if those adhesions had not been present and so acted as a check to the bleeding. The decision to postpone the operation until the condition of the patient had improved seems to have been fully justified by the result. I am very doubtful whether the outcome would have been so satisfactory had she been operated on at once on the second admission. As to the question of the advisability of operating at all I scarcely think there could have been two opinions, and in this decision Captain Thurston entirely concurred with me.

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AN EPIDEMIC OF DYSENTERIC DIARRHŒA.

By THOMAS ORR, M.B., CH.B. GLASG.

WHILE acting as locum-tenent at a coast town on the Clyde during March last I had the opportunity of investigating an epidemic of dysenteric diarrhœa which was interesting clinically as well as from a public health point of view. The interesting features of the outbreak were: (1) its occurrence in spring during very cold weather with biting east winds and sleet; (2) its attacking all ages (from 10 months to 82 years) and all classes alike; and (3) the fact of the cause having been milk-borne, except in two cases which resulted from direct contact with a patient suffering from the disease.

Symptoms.—In most of the cases the onset appeared to be quite sudden, beginning with a feeling of chilliness and nausea, followed by diarrhœa a few hours afterwards. Vomiting was present in three cases only and consisted of simple emptying of the stomach contents, no bile being present. Cases 13 and 14 complained of chilliness at night and on the following morning diarrhœa came on. Fever was present in most cases, varying from 100° to 104° F. The fever was highest on the first day and then gradually fell to normal. The pulse was full and quick and varied with the temperature mostly. The tongue was thickly coated with white moist fur, with clean tip and edges. Flushing of the face was present in most cases, with pallor round the mouth. Slight headache was complained of in a few. The diarrhœa was of a dysenteric type, varying in degree, the stools consisting of bloody mucus, often of pure blood, and in one case two large black sloughs were passed. The number of stools passed in the day