

morning, and he was treated generally for dyspepsia.

A week after admission a *test meal* was given to the patient and the gastric contents examined with the following result: Reaction acid. Free acid—present. Hydrochloric acid—present. Lactic acid—traces. Butyric acid—*nil*. Total acidity, 16 per cent. Albumin—present. Albumose—present. Bile—*nil*. Blood—*nil*. Microscopic examination showed that mucin and starch granules were present.

On the 6th September 1910, the patient was given a *bismuth meal* and examined under the *X-rays* about four hours afterwards. The stomach was seen to be very much dilated, the pyloric orifice being in the right loin, and it was in this situation that a dark shadow was seen due to the collection there of the bismuth meal, in spite of the fact that four hours had elapsed between the meal and examination. No trace of bismuth appeared in the intestines. There seemed to be definite kinking and contraction of the pyloric end of the stomach. The pylorus moved with respiration and also on palpation between two fingers. The fact that the patient had a dilated stomach with marked stenosis of the pylorus having been thus demonstrated, and, as the patient did not improve under treatment and was steadily going down hill, an operation was decided upon. On the 13th September, after washing out his stomach and preparing him for operation, Major Bird performed a modified Von Hacker's operation of Posterior Gastro-Jejunostomy. The patient being extremely feeble, ether anæsthesia was employed instead of chloroform. The pyloric end of the stomach was found thickened and cartilaginous. The small intestines were put out of the way and covered with abdominal towels wrung out of warm sterile water. The transverse colon was withdrawn from the wound and similarly treated. The termination of the duodenum was arrived at by palpating along the transverse meso-colon, near the lower border of the pancreas.

Thus a portion of the jejunum as high as desired could be got at easily, and so the establishing of an anastomosis too low down, and the loss of a large absorbing surface (which may cause rapid emaciation of the patient even when the operation as such is successful), was avoided. An incision was made through the transverse meso-colon and the lesser sack of the peritoneum opened, and the posterior wall of the stomach reached. The margins of the opening were stitched to the posterior gastric wall. A clamp was placed on either side of the selected portion of the bowel, and also across that of the stomach. Sterilised gauze was packed all round the site of operation to catch any fluid that might escape. The sero-muscular coats of the jejunum and the stomach were sutured at the lower part

by fine continuous sutures of silk, leaving the ends long. A longitudinal incision was made into each viscus about two inches long and about half an inch in front of the line of the sero-muscular suture. A second suture was employed to stitch the jejunal with the gastric mucous membrane all round the opening, the assistant pushing the viscera forward, so as to approximate them as the anterior part of the incisions were reached. The peritoneal toilet having been completed, the different viscera were replaced carefully in their proper places and the abdominal incision closed with twelve interrupted sutures of silk-worm gut. The patient was dressed with dry aseptic gauze and removed to the ward. He was allowed only small sips of warm water for the first 48 hours, care being taken that the stomach was not in any way overloaded. Nutrient enemata of six ounces of peptonised milk was given four times a day. On the first night of the operation the patient's chest was full of râles and the mild attack of bronchitis he had before the operation was accentuated by the ether anæsthesia. His temperature ran up to 101.6. For two nights 1/100th grain of atropin sulph. was injected subcutaneously to stop the secretion of the bronchi.

At the end of 48 hours, raisin tea was allowed by the mouth; by the fifth day after the operation rectal alimentation was stopped and a little sago mixed with raisin tea was given. The bowels were unloaded periodically by means of the compound fetid enema mentioned above, given slowly with a long tube. Alternate stitches were removed on the seventh day after the operation. On the tenth day all the stitches were taken away, and soft solid food allowed.

This case is remarkable, for, in spite of the extremely rundown condition of the patient which necessitated substituting ether for chloroform anæsthesia, he bore the shock of the operation well and did not show one bad symptom. He never had regurgitant bilious vomiting, nor did any other evidence of a vicious circle supervene. In fact, his general health improved considerably within a short space of time.

A CASE IN WHICH VON PIRQUET'S REACTION WAS FOLLOWED BY ASCITES.

By D. G. COOPER,

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Previous History.—In September 1911, Sepoy P. was admitted into the regimental hospital for fever. As the result of a Widal's test a diagnosis of "Enteric" was made. There was no splenic enlargement and the temperature chart is unlike that of typhoid fever. The

condition lasted one month, and after another month's convalescence in hospital the patient was sent on three months' sick leave.

History of Present Illness.—Sepoy P. returned from leave with a discharging sinus in the right side of his neck. There was also a large swelling above the sinus under the middle of the sternomastoid muscle and a little behind it. The discharge from the sinus was thin and watery with now and then some caseous material. The diagnosis of tubercular glands in the neck was made, and a request to invalid the man was sent to head-quarters.

About this time Messrs. Burroughs and Wellcome sent me a number of drugs as an advertisement, and amongst others was some tuberculin human for von Pirquet's reaction. This was tried on the 7th of March. There was no cutaneous reaction. From the 8th to the 13th of March the temperature varied from 100° to 101° in the morning and from 102° to 104° in the evening.

On the 14th and on the morning of the 15th the patient complained of some uneasiness in his abdomen, but I was not told of it. On the evening of the 15th he was in pain and the Sub-Assistant-Surgeon gave him an enema which had no effect in reducing the pain. The temperatures on these two days were 99.2° and 98.4° in the morning and 100° and 101° in the evening. 16th March—temperature morning 98.4°, evening 101°.

Patient is lying on his back; the abdomen is swollen, the umbilicus is level with the rest of the skin, the superficial abdominal veins are not distended. Respiration is thoracico-abdominal.

Palpation shows no abdominal rigidity; there is a little tenderness in the left *iliac fossa*.

The percussion note is dull at the flanks and tympanitic in the middle of the abdomen. The dullness shifts with the position of the patient. The thrill given by fluid can be felt.

There is nothing to note in the respiratory or circulatory systems.

17th—22nd March.—The ascites is diminishing daily. The patient is beginning to look thin about the face, which was fat on admission.

At this juncture the invaliding papers came back from the P. M. O. of the division and the man was invalided. I tried to keep him in hospital, but he would not stay.

A few days later, before leaving the station, he came to see me. The ascites had increased and the man looked very ill, and in spite of all our efforts he left for his home.

The first question that rises to one's mind is—did the tuberculin cause the ascites—and, if so, did it light up an old or a new affection? There are no notes on the attack of enteric fever, but the Sub-Assistant-Surgeon of the regiment tells me that the officer who made the

diagnosis was in doubt about it. It might have been tubercular peritonitis. If so, could the very small quantity of tuberculin used for Von Pirquet's reaction cause such a severe and acute relapse?—or was the sequence accidental?

I presume the ascites commenced on the day on which the patient complained of pain in his abdomen, because it was well marked on the day I examined the man. If so, it is interesting to note that the beginning of the ascites, like the appearance of the rash in many fevers, was accompanied by a fall in temperature.

THE RELATIONSHIP BETWEEN "PYREXIA OF UNCERTAIN ORIGIN" AND ENTERIC FEVER.

By D. M. TAYLOR, M.B.,

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I READ with much interest an article in the August number of the *Indian Medical Gazette*, by Captain James Husband, I.M.S., and Lieutenant H. V. Hodge, I.M.S., on certain obscure cases of pyrexia which they had had under observation. I propose to place on record a very interesting series of cases which I had in my charge between January and March 1912.

Some of these cases gave a clinical picture resembling a typical attack of enteric; others a mild or less typical form; but in all Widal's reaction was persistently negative, an undoubted case of enteric with a marked positive reaction died in hospital at the commencement of the series; three of the cases resemble enteric so closely that no other diagnosis is possible in spite of the negative reaction; while two others resemble a mild enteric or paratyphoid infection, and are similar, I imagine, in many respects to some of these cases referred to in the above quoted article. The cases have an important bearing on two questions and fall naturally under one or other of two headings, *viz.* :—

- (1) Enteric fever giving a negative reaction.
- (2) Pyrexia of uncertain origin.

The case of enteric fever which gave a positive reaction was admitted on January 14th and died on January 28th, 1912. The reaction was positive in dilutions even of 1 in 160.

Case I.—The first case of this series, admitted on January 2nd, had twenty-one days pyrexia, six days intermission, and a relapse of twenty-one days which appears to have been brought on by his eating some sweetmeat given him by a friend (*sic*). The pulse was relatively slow throughout.

There were very marked rhonchi all over the chest, sometimes very moist in character, but unaccompanied by other physical signs. It was noted that the amount of the râles appeared to increase concomitantly with an exacerbation of fever and *vice versa*. The spleen was not enlarged and there was no rash nor diarrhoea. The patient became lethargic, drowsy, and anæmic, but was