NOTES OF SOME INTERESTING CASES.

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The following cases are of considerable professional interest:

Case I. Sarcoma of Humerus, Berger's Amputation.—Lance-Corporal L. was admitted to the Royal Infirmary, Dublin, on May 26, 1913, with an oblique fracture of the left humerus, about the junction of the middle and upper thirds. The fracture was treated by splinting and extension. An X-ray photograph taken a week later showed the position to be unsatisfactory, and on June 3, 1912, it was wired and put up with a moulded porous-plastic splint. The result was in every way good. On July 16, 1913, the day he was about to be discharged from hospital, he fell down a flight of stone steps and fractured the humerus again. This time the fracture was a transverse one just below the original fracture. He was treated in splints with extension, and the fracture united without trouble in excellent position. He was discharged to six weeks' sick furlough on August 31, 1912.

On return from furlough he reported sick, and was again admitted to hospital. He stated that his arm had done splendidly (he was using 8 lb. dumbbells) until about a fortnight previously, when he noticed that it was getting larger. On examination a hard mass was found round the site of the fracture, which at first was thought to be excessive callus. During the next fortnight the tumour grew rapidly larger, an X-ray photograph showed expansion and complete absorption of that portion of the shaft of humerus involved; sarcoma was diagnosed. Under an anaesthetic a piece of the tumour was removed for microscopic examination, and it was reported to be a pure spindle-celled sarcoma.

On November 20, 1912, Berger's four-quarter amputation was performed in the usual stages. He suffered somewhat from shock, but afterwards recovery was rapid, the wound healed completely by first intention. He was invalided on February 1, 1913. A shoulder pad was fitted, and he was discharged from the Service on March 6, 1913, in good health. He reported on July 4, 1913, at the Queen Alexandra Hospital, London, and had then no sign of recurrence.

The points of interest in connexion with the case are:

(1) Was the sarcoma present at the time of fracture? Apparently not, because the X-ray plates do not show it, and sarcomata are recognized as a cause of non-union in bone.

(2) The tumour was endosteal and yet spindle celled.

(3) Does the presence of foreign body in bone, such as a wire, predispose to sarcomata?

Case II. Acute Appendicitis, Liver Abscess, Recovery.—Private M. was admitted to the Royal Infirmary, Dublin, as a transfer from Mullingar. He had a history of one week's illness with symptoms typical of acute appendicitis.
On admission he was very definitely tender over the appendix, but as there was no other indication for an immediate operation it was decided to wait and do an interval operation. During the next three days he rapidly improved; the local symptoms disappeared, and the leucocyte count fell from 30,000 to 13,000.

On October 22 he developed acute symptoms, pyrexia, diaphragmatic cough, &c., and signs of consolidation of the right base; the leucocyte count was 18,500, polymorphonuclears, 56 per cent; lymphocytes, 20 per cent; large mononuclears, 23 per cent; and eosinophiles, 1 per cent.

During the next week he went downhill rather rapidly; the temperature chart was of a swinging type, and he complained of diaphragmatic cough and shooting pain in the right side on deep inspiration. All his symptoms pointed to pus somewhere about the liver region.

On October 31 the liver was explored, but no visible pus was found; a plug of material was aspirated, which was found to contain pus cells and staphylococci in pure culture. This established the diagnosis of a septic infection of the liver. Constitutional signs continued, but no further developments took place until November 10, when a dull patch was located over the eighth rib in the mid-axillary line. On exploration pus was found. Next day a portion of the eighth rib was removed in the posterior axillary line, and the diaphragm stitched to the parietes. On November 14 the diaphragm was incised and the liver surface found absolutely free. A soft spot in the liver substance was located into which the finger slipped easily, and about 6 oz. to 8 oz. of pus were evacuated.

His condition for some days was somewhat precarious; he was given large doses subcutaneously of polyvalent anti-staphylococci serum, and whether as a coincidence or consequence he began to improve. Convalescence was rapid.

He was discharged to sick furlough in perfect health. Up to May 2, 1913, he had not reported sick at his station since his return from sick furlough.

Pylephlebitis is given as a complication of appendicitis in most textbooks, but not liver abscesses. It is my impression there are only about some dozen recorded cases of recovery in this fortunately rare complication of appendicitis.

I am indebted to Captain C. H. Turner, R.A.M.C., for the final history of these cases, as I handed them over to him on January 3, 1913, on departure for foreign service.

Case III. Multiple Tropical Abscess of Liver.—Private H. was admitted on January 2, 1911, to Portobello Hospital, Dublin, for anaemia, wasting, and fever; he was transferred to Royal Infirmary on January 7, 1911. I saw him on January 11, 1911.

Previous History.—He had done two tours of foreign service in India, six years and eleven years with one year between. He never had
dysentery. He stated that he felt ill before embarking for home in October, 1910, but was afraid to report sick as he thought it probable that he would not be allowed to embark. He owned to being a moderate beer-drinker. He was on furlough during November and December, and reported sick on return to his regiment.

When I first saw him he had been in hospital nine days, his temperature was of the hectic type, he looked ill, the complexion was muddy, there was much emaciation, and the abdomen was large and prominent. He presented a perfect picture of portal obstruction. The liver was much enlarged, the spleen was swollen, and he was suffering from diarrhoea. Haemorrhoids were present, and there were large veins running over the surface of the abdomen on to the thorax; the abdomen contained free fluid, the heart was displaced upwards and to the left, the urine was normal.

At the time I expressed an opinion that it was a case of portal obstruction and hypertrophic cirrhosis of the liver. A week later I was asked to see him again, as he had developed a tender spot in the epigastrium. His breathing was distressed; paraesthesia abdominis was at once performed and 30 oz. of ascitic fluid were drawn off. The left lobe of the liver was explored with an ordinary exploring needle and pus found. The diagnosis of liver abscess was established. Leucocyte count 18,000.

Next day the abdomen was opened in the middle line. The liver was found adherent to the anterior abdominal wall, and it was stitched to the parietes, incised, and an enormous quantity of pus evacuated from the left lobe, and a large drainage tube inserted. For the next few days he improved and seemed much relieved. After this he became worse, cardiac failure and general anasarca, together with suppression of urine, occurred; he was treated in the usual way and rallied. The right lobe of the liver remained large. On the 27th it was explored, pus was found and 90 oz. evacuated by aspiration; the cavity was injected with quinine solution, as recommended by Rogers. He at once improved, the general anasarca disappeared, the peritoneal fluid was absorbed, the secretion of urine increased in quantity, and the heart came back to normal position. By February 4 the right lobe of the liver was again as big as before; he was given 20 gr. of ipecacuanha in keratin-coated pills for three evenings in succession. On February 7 the right lobe was aspirated and 90 oz. of pus again evacuated.

Up to this time the sinus from the left lobe was discharging freely; on culture of the pus it was found to be infected with staphylo cocci.

From this date the change in his condition was wonderful; the temperature was normal, the blood count became normal in thirty-six hours after aspiration, the sinus dried up like turning water off at a tap, in spite of its having been infected with septic organisms. He left hospital on March 5, having put on 14 st. in weight.

Remarks.—Perhaps I ought to apologize to the readers of the Journal
OF THE ROYAL ARMY MEDICAL CORPS for publishing a case of tropical abscess of the liver. I have done it for one reason only, to illustrate by an extreme case the value of ipecacuanha in tropical liver abscess. When I say ipecacuanha I mean either the fresh powder or the more active preparation, emetine hydrochloride.

We have all heard of the treatment by ipecacuanha of the presuppurtive stage of amebic hepatitis; unfortunately, in a great many cases this stage is never sufficiently acute to make them report sick, just as they never have acute intestinal signs of amebic infection.

The particular case before us never reported sick until he had two enormous abscesses; there was no history of dysentery or even of diarrhoea.

Captain C. H. Turner, R.A.M.C., treated thirty-five cases of liver abscess in India by the open operation and ipecacuanha; there was only one death, the first case, to which he gave no ipecacuanha. I saw a reservist in Dublin, a huge-framed man, reduced to a skeleton, coughing up two pints of liver pus daily. He was given emetine hydrochloride, and in four days his cough was dry. Since I started using ipecacuanha in these cases I have not lost one. It is not necessary to do the open operation except in cases of left lobe abscess, pointing in the middle line; here one would be afraid of adhesions being torn through after aspiration and pus escaping into the general peritoneal cavity. It is quite possible that in small abscess cases difficult to hit off with the needle ipecacuanha will effect a cure. On looking up the last two Army Medical Reports I find the death-rate for liver abscess to be 50 per cent. If these were all tropical abscesses I cannot help thinking that this is 50 per cent too high. Emetine hydrochloride should, of course, always be given, because it is so much more active and more easily tolerated; and also because the possibility of the powdered ipecacuanha not being fresh is eliminated.

Case IV. Inoperable Sarcoma of the Right Iliac Fossa. Treated by Coley’s fluid; recovery.

I regret I have no detailed notes of this case, and must give it from memory. A bombardier in the R.H.A., stationed at Newbridge, was admitted to the Military Hospital, Curragh, in August, 1910, with the following history:—

While at gymnasium he felt a pain in the right iliac fossa; at the time he did not take any notice of it. Afterwards, however, while palpating the part he detected a lump about the size of an orange, reported sick, and was admitted to hospital. The lump grew rapidly. An exploratory laparotomy was done and a tumour growing from the right iliac fossa exposed; on cutting into it, it was found to be solid and very vascular, resembling a sarcoma to the naked eye. With great difficulty the bleeding was stopped and the wound stitched up. Unfortunately, no piece was removed from the tumour for microscopic examination.
In October he was transferred to the Royal Military Infirmary, Dublin, where he came under my care. On admission a solid mass could be felt filling up the whole right iliac fossa and extending across the middle line. Injections of Coley's fluid, commencing with \( \frac{1}{2} \) ml doses given subcutaneously, were at once given; the maximum dose which could be tolerated was 2 ml. After the first week the injections were given into the tumour. In all he had seventy-seven injections, and ultimately the tumour disappeared. It was found necessary to give the injections for about ten days, followed by a week's interval. I had an opportunity of seeing this man some nine months afterwards at Aldershot. He was then in excellent health and doing full duty.

THE RADICAL CURE OF SACCULAR INGUINAL HERNIA.

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The fact that the operations described for the radical cure of this form of hernia are very many and of great ingenuity and variety, and that they all possess the common factor of some form of sac obliteration, rather tends to suggest that this part of the operation is the essential thing and that the method of completing it is comparatively unimportant.

Now Bassini's operation, or some slight modification of it, is still largely done in the Service, and the object of this short paper is an attempt to show that the muscle-suturing part of this procedure is unnecessary and harmful, and that it involves a longer operation and a longer convalescence.

When we consider the conditions under which hernia is prevented from occurring in the ordinary way during increased intra-abdominal pressure we have a mental picture of a fixed diaphragm, contraction of the abdominal muscle, straightening of the curved lower border of the transversalis and internal oblique, close approximation of these to Poupart's ligament, and automatic closure of a possible exit which, owing to position and structure, is the weakest part of the abdominal wall. The above action is helped by flat pressure from the external oblique aponeurosis.

We are thus forced to the conclusion that the integrity and free action of the lower fibres of the transversalis and internal oblique are essential in the prevention of hernia from the normal abdomen, and when a sac has been tied and reduced and normal conditions thus obtained, common sense suggests that the less this important bundle of muscle fibres is interfered with, and the sooner it is freely working again, the better.

Why then anchor it down to a nearly rigid structure? Why alter the natural function of the part? Is not Nature's method good enough? Moreover the muscle cannot stay permanently where it is sutured unless