of physical force than the heart or lungs, which the severest violence alone is capable of rupturing. The injury too was sustained as nearly as possible directly over this diseased spleen, and from what we now know of the behaviour of spleens under similar conditions, the wonder is that it was not blown to atoms by the explosion.

A MIRROR OF HOSPITAL PRACTICE.

CASES

Treated by Surgeon-Major F. ODEVAINE, F.R.C.S., *Bhopal Battalion.*

(*Continued from page* 318.)

LARGE HYDATID TUMOUR OF THE SPLEEN.

AN emaciated woman, aged about 40, of low caste, was attacked by severe diarrhœa and vomiting, and died rather suddenly. A suspicion of poisoning called for a *post-mortem* examination, but there was nothing in the appearance of the stomach or intestines to lead to the belief that any poison had been taken by, or administered to, this woman, the immediate cause of whose death was probably due to syncope, as a light coloured clot was found in the left cardiac ventricle.

On opening the abdomen, a large tumour was seen to occupy the left hypochondriac region, extending across the epigastric, beneath and behind the stomach towards the liver, to the under surface of which it was adherent.

The tumour externally presented a light yellowish coloured fibrous appearance, and was globular and smooth; with some difficulty, an incision was made into the external, thick, almost cartilaginous sac, when a quantity of collapsed yellowish grey gelatinous bladders escaped, and afterwards, a large number of cysts distended and perfectly round were removed, some as large as a hen's egg, whilst others were the size of a pin's head. A good many of the larger ones contained two or more concentric layers, and all, when punctured, contained clear watery fluid, which was ejected with some force, owing to the elasticity of their coats, which were either of a pale yellow tinge or milky white, the latter colour prevailing in the smaller sized cysts. On making an incision into any of these hydatids, their coats curled up and turned inside out.

The tumour appears to have originated in the spleen, part of which seems to have been absorbed, and the rest of this organ was pushed upwards and backwards, being inseparably attached to the fibrous capsule of the tumour, which, from its size, pressed upwards on the base of the left lung and pericardium, and must have mechanically interfered more or less with the heart's action.

I made several microscopic examinations of the contents of some of these hydatids, and was only able to discover a good number of acephalocysts, but no echinococci nor remains of hooklets. In none of the other solid organs did I find any hydatids, and I regret not having examined the intestines throughout, to ascertain the presence or otherwise of *tænia.*

From the fact of this woman being of the sweeper caste, it is probable she was brought more or less into close contact with dogs, and as these animals are known to be frequently affected by tape-worm, it is possible that discharged *proglottides* from them got accidently mixed with this woman's food, or the ova with her drinking water, and thus she unconsciously gave a *habitat* to the embryo of some form of tape-worm. Of course there are many other ways in which the ova of these parasites may enter the system of an animal, but it is a curious fact, that in Iceland, where dogs are so plentiful, a very large proportion of the people are affected by the scolices of *tænia.* The proscolex, as we know, by means of its spikelets makes its way into various organs and parts of the body, yet it seems curious that it should become encysted only in one organ, and that, as in the case under consideration, acephalocysts should be the result, which of course could never at a future time become developed into *tænia.*

It is quite evident that an individual affected by tape-worm, may, owing to the existence of constipation, retain the already detached segments of the parasite sufficiently long to allow of the extrusion of their contained ova, which eventually giving exit to the proscolex, the latter would, as before mentioned, become encysted in some organ or part of the body, by, in the first instance, perforating the intestinal wall, or by entering a vein be carried away by the current of blood and become deposited, say in the parenchyma of the liver, giving rise to hydatid disease of that organ, an interesting case of which, successfully treated by the injection of the extract of male fern, was published by Dr. F. W. Pavy in the *Lancet* of September 1st, 1866.

(*To be continued.*)

CASE OF STRICTURE OF THE ŒSOPHAGUS.

By J. CLEGHORN, M.D., *Civil Surgeon, Naini Tal.*

THE patient, a married man, was fifty-two years of age, twenty of which were spent in India. He had been in England from July 1876 till 11th April 1877.

For about fifteen months previous to the 15th May, when I first visited him, he had little or no appetite for breakfast, and had suffered more or less from morning sickness—symptoms of chronic inflammation of the stomach, produced by the immoderate use of alcoholic stimulants. His bowels acted very irregularly, and during the last month of his residence in England he had to consult a physician for habitual constipation. About the same time he became conscious of a dull pain in the epigastric region, which, a fortnight later, alternated with a similar pain in the corresponding region of the spine. After being a few days at sea, on the voyage out, he frequently vomited after meals, not in any way attributable to sea sickness, and he soon had to give up the use of solid food.

When I saw him on the 15th May, he had a slightly careworn and anxious look. To relieve the epigastric pain he instinctively walked or sat with the body bent, and when in bed he usually lay on either side with the thighs and spine flexed.

His symptoms were pain in the epigastrium, vomiting, and inability to swallow solid food.

The pain was of a dull dead character, never acute. It was clearly defined in a circular space, three inches in diameter, situated in the upper part of the epigastric region, rather to the right. Gentle pressure over this area could hardly be borne, but deep pressure around it caused little or no inconvenience. The recti muscles were hard and rigid, but there was no visible swelling. The percussion note over the seat of pain was decidedly dull, but not the dulness of a solid body, as it could be best elicited by gentle percussion, and almost entirely destroyed by strong percussion. Vomiting, or rather regurgitation, was always produced by solid food, even the smallest particle, or by taking too great a quantity of liquids at one time. It also occurred in the early morning, without anything having been swallowed, and then large quantities of glassy mucus were brought up.

In the act of swallowing, he was conscious that an obstruction existed to the passage of food somewhere behind the lower end of sternum, and when the food passed this point, he would confidently say "now it will stay down."

On the 1st June a dose of oil was taken for the relief of constipation, but without effect. A large simple enema of warm water was then given which removed large quantities of scybala. A similar enema was repeated daily or on alternate days, till within a fortnight of the patient's death. Solid fæces were brought away by these enemata in such enormous quantities that the whole of the large intestine must have been distended with the accumulation of months.

With regular action of the bowels the epigastric pain became easier and the regurgitation not so constant. Morning sickness with hawking up of mucus continued.

On the 29th June brought up without effort a clot of blood, two inches in length and the thickness of the little finger. On the following day a persistent cough supervened, which continued for a week, and by preventing sleep, produced great exhaustion.

On the 19th July he brought up about a teacupful of coagulated blood, followed by purulent matter, of a most filthy odour. This bad smelling pus continued to be coughed up, till the day of his death on 27th July.

The symptoms at first pointed to an ulcer of the stomach, but afterwards the regurgitation of food became so marked, that obstructive disease at or near the cardiac orifice of the stomach was believed to exist.

Bismuth, with large doses of opium, was given throughout the course of the disease, until the patient could no longer swallow, and then he was kept under the influence of morphia, hypodermically injected.

On *post-mortem* examination, which was limited to the organs believed to be implicated, the inner surface of the stomach was found coated with thick discoloured mucus. The surface, after

washing had a velvety appearance from congestion of the capillaries, and at the cardiac end the congestion was so intense that it looked like extravasation. The liver was undergoing fatty degeneration.

The œsophagus immediately above the diaphragm was hard and contracted, the contraction opening upwards into a sacculated pouch, extending to the right to the size of a small orange.

The walls of the pouch were hard and thickened; its cavity was very irregular and coated with dirty coloured offensive pus, similar to that which had been spat up during the latter days of the patient's illness. An irregular-shaped foreign body—it looked like tartar from the teeth—the size of a small bean, was found in the pouch. It is impossible to say how or when it got there. No disease of the vertebræ could be detected.

A CASE OF SUDDEN DEATH FROM RUPTURE OF THE SPLEEN.

By W. M. COURTNEY,
Surgeon, in Medical Charge, 38th Regiment, N. I.

No. 2007, Sepoy Sirdar Ram, A. Co., 38th Regiment, Bengal Native Infantry, a spare built man, of weak constitution, age 22 years, height 5 feet 9 inches, circumference of chest 31 inches, weight 133 lbs. on the 1st August 1875, service 3 years, was admitted to the regimental hospital at Barrackpore on the 18th November 1877 for hypertrophy of the spleen with ague. When admitted he was in a weak, anæmic state, and somewhat wasted. He then complained of previous severe attacks of quotidian ague and enlargement of the spleen. On examination, the latter organ appeared much enlarged and indurated, and protruding in the left hypochondriac region. He did not complain of pain, but of weakness, and inability to perform his duty. He was then treated for ague with cinchona febrifuge, and red iodide of mercury ointment applied over the splenic region.

A few days before his death, his *charpoy*, which was a very ricketty one, fell to the ground, owing to the legs having given way, but this does not appear to have had any injurious effect on him. His comrades in hospital attributed the collapse of the bed to the influence of a "*bhut*," or evil spirit, and fully believed that this was the ultimate cause of his sudden death.

This man's case seemed an ordinary one of ague with splenic enlargement, and a fatal result was not of course looked for.

On the 23rd November, about 11·45 A.M., when returning from the hospital latrine, he was seen to fall on the tiled floor of the hospital, close to his bed, and then he became unconscious. Water dashed in his face revived him a little, but he gradually got weaker, and died in about fifteen minutes after falling.

As the death of this man was sudden and unexpected, a *post-mortem* examination was made for the purpose of discovering the cause. The autopsy took place at 4-30 P.M. on the 23rd November, with the following results:—On opening the thorax, the heart, lungs, trachea, and œsophagus were removed *en masse*. A careful examination failed to shew a satisfactory explanation of the fatal issue from any of these organs. The right lung was congested, and the cavity of the pericardium contained an unusually large quantity of fluid. On opening the abdomen and removing the spleen, the cause of death was clearly manifest. On the convex surface of this gland, about an inch from the anterior edge, and nearly parallel to it, was a longitudinal rupture, extending for about four inches. Half an inch behind it was another, commencing near the lower extremity of the former, not so extensive, and directed upwards and slightly backwards. The organ weighed 3lb 7oz. There was a quantity of blood in the cavity of the peritoneum.

The ruptures would seem to have been occasioned by the fall just before death, and the fall itself by the exertion of walking from the hospital latrine. The texture of the organ was friable, and as the patient was thin, and the spleen protruding in the left hypochondriac region, a fall, such as this, might easily cause those ruptures disclosed by the *post-mortem* examination.

BARRACKPORE, *November 29th*, 1877.

Prof. Dittel on Lister's Method.—Prof. Dittel, having employed Lister's method strictly in 129 cases, has come to the conclusion that it is unsuitable in wounds where thick, fatty flaps are to be united, and in diseases in the substance of bone. In the majority of cases he believes it to be the best method that can be employed.—*New York Medical Journal.*

CASE OF STRANGULATED INGUINAL HERNIA, WITH GANGRENE OF THE GUT: RECOVERY WITH ARTIFICIAL ANUS.

By R. D. MURRAY, M.B., *Officiating Civil Surgeon, Chittagong.*

MINNUT ALI, a Mahomedan, aged 34 years, was admitted to hospital on the afternoon of the 14th June 1877, with strangulated inguinal hernia of the right side, of 12 days' standing. He had been brought in a distance of 13 miles, and was in a state of great prostration and suffering. He was scarcely able to speak, but his friends stated that the rupture came down 12 days before, and since then he had not been able to return it into the cavity of the abdomen. During all that time there had been no passage from his bowels, and up to within two days of his admission he had vomited severely. I was unable to ascertain whether the vomiting was stercoraceous or not, but the probability is that it was.

On admission his pulse was 120, small and weak; his skin cold and clammy. The right side of the scrotum was largely distended, and a hernia at once diagnosed; the tumour was very tense, but the skin over the neck of the sac was neither boggy nor œdematous, and there was no emphysema.

The patient was at once put under chloroform and taxis gently tried without success. I then cut down upon the sac in the usual way, and was able to distinguish one by one the successive coats of the hernial covering. On exposing the sac reduction was attempted without cutting into it, but again without success. On laying open the sac, about six ounces of sanious serum forcibly escaped, and the hernia was found to consist of several coils of small intestine with some omentum. The intestine was covered with plastic lymph gluing the coils to one another and to the sac, and was of a dull non-glistening violet red colour. The constriction was found to be at the neck of the sac where the tissues were much thickened, forming a hard dense ring. On freely dividing the neck anteriorly, by cutting forwards towards the integument, I was in a position to return the gut into the abdomen. I succeeded in getting about 3 inches back when the gut suddenly gave way, like wet blotting paper, at one spot where it was perfectly gangrenous and of a greenish colour.

I at once desisted from all further attempts at reduction of this portion of the protrusion; but succeeded in returning the remaining 6 or 8 inches, keeping the ruptured portion tightly grasped between my left fore-finger and thumb at the wound. I then stitched the edges of the rupture in the gut to the edges of the skin wound with catgut, and secured the remainder of the original incision over the sac with silver wire. Loose carbolic dressing was applied over the wound and a pad or cushion of oakum—this being the best substance for absorbing discharges and having also the advantages of being antiseptic. The operation was performed under carbolic acid spray, and the minutiæ of the process carefully attended to, as I used to do when a dresser under Professor Lister at Edinburgh. The rupture of the gangrenous gut of course rendered the application of the system abortive, and it was never continued after the first day—loose antiseptic dressings merely being applied, and the wound kept scrupulously clean of all fæcal discharges from the intestine.

An opiate was given immediately after the operation, and ½ a grain of opium ordered to be given every hour throughout the day. On the second day he had ½ a grain every three hours, and on the 3rd day the same quantity every four hours; this was continued on the 4th day. On the 5th day hyoscyamus was substituted for the opium, which had begun to produce depression; he was ordered ten drops of the tincture thrice daily. No vomiting or tympanitis followed the operation, and there was no pain or inflammation about the abdomen. The temperature continued high for the first five days, ranging between 100°F. and 104°F. His pulse during the same period remained very quick, varying from 132 to 100.

On the 19th June the hernial sac was found filled with discharge, and a counter opening was made posteriorly and inferiorly, which allowed a free drain. The sac very soon contracted and filled up, leaving a healthy rosy granulating wound corresponding to the original incision over the sac. A guttapercha tissue drainage tube was passed from the anterior to the counter opening. The discharge from the aperture in the intestine consisted for the first seven days of a slimy greenish bilious matter without any fæces and free of odour. It caused a little irritation of the surrounding skin, but by scrupulous cleanliness and the use of boracic ointment this tendency was at once checked. A few fæcal stools passed per anum.

On the 5th day quinine began to be administered, and his food consisted of milk, arrow-root, sago and rice.