place to overcome the shock was so successful that no one, on seeing the patient two hours after, would have diagnosed the condition except by careful examination of the liver dulness. The operation itself was conducted under light anæsthesia, the patient herself saying afterwards that she was conscious most of the time of what was going on, and it did not in any way depress the patient. Closure of the perforation by a purse-string suture was out of the question on account of the friability of the intestinal walls; longitudinal suture only was possible. The liver dulness was noted five hours after the operation to have returned down to a point one inch from the margins of the ribs.

The rapid onset of peritonitis, following an attempt to get out of bed, pointed to the conclusion that a second perforation had taken place; but, as none was found at the *post-mortem* examination, one must conclude either that it had been overlooked, or that the peritonitis had started from the second ulcer, from the base of which the peritoneum had already disappeared. The condition of the sutured bowel was in every way satisfactory, and it would have doubtless been better to have sutured the second ulcer at the same time, or to have scarified its base; the serious condition of the patient, however, necessitated a speedy termination of the operation.

The most noticeable feature at the operation was the appearance of the intestine, each ulcer being plainly indicated by a zone of brilliant injection, corresponding to its base, in the centre of a thickened oedematous portion of the gut, a condition quite different from the usual *post-mortem* appearance.

Although the patient was prostrated by a three weeks' illness, there was nothing in the abdominal wound, or in the sutured portion of the gut, to indicate any want of repairing power. The return of the delirium indicated that the course of the pyrexia had not yet ended; and the extensive ulceration of the intestine was a further proof of the intensity of the attack.

It is much to be regretted that, in a case promptly diagnosed and operated on only two hours after perforation had occurred, the result should have been so disappointing.

A FURTHER NOTE ON THE TREATMENT OF ABDOMINAL HYDATID DISEASE BY EVACUATION WITHOUT DRAINAGE.

By C. J. BOND, F.R.C.S.,
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THE BRITISH MEDICAL JOURNAL for April 11th, 1891, contains an account of a method of treating abdominal hydatid cysts by incision and evacuation of the cyst contents, and the return of the adventitious cyst into the abdominal cavity without drainage. Since that was written Dr. Thomson, of Brisbane, and Dr. Gardner, of Melbourne, have reported cases, and the method seems to be recognised and practised in Australia. Judging, however, from the absence of published reports, I do not think that many cases have been so treated in England, and, as I feel convinced that the principle is sound, I am induced to record the following case which I have lately treated, and which gives further evidence of the safety of the proceeding:

A short time ago I opened the abdomen of a male patient, aged 36, who had suffered for some years from a swelling the size of a coconut in the right flank; the patient was in other respects healthy, and the symptoms produced were those of pain and pressure. One large and two smaller hydatid cysts were first found; the larger cyst contained clear fluid and daughter cysts, the smaller ones pultaceous material with chalky deposit; these three omental cysts were removed entire, the adhesions to colon and mesentery, though extensive, being separable. On further exploration, two more cysts were found in the liver on the under surface, one near the anterior edge and a larger one deeply placed near the transverse fissure. After packing the peritoneal cavity around, both cysts were incised and the pultaceous laminated material which formed their degenerated contents evacuated; some of the chalky *débris*, however, was very adherent to the

inner wall and was left; the interiors of the cysts were then thoroughly wiped out with carbolie lotion (1 in 20), rubbed over with iodoform, and left quite dry. No attempt was made to close the opening in either cyst, and the abdominal wound was closed without drainage. Recovery was rapid, the temperature remaining normal.

As I previously ventured to point out, the advantages of this method are very great; not only can deeply placed cysts be thus dealt with, which it would be very difficult or impossible to drain, but, in addition, a primary union and a rapid recovery are substituted for a tedious convalescence, with all the risks attending the drainage of a large cavity, and an open wound; the experience of this case further shows that not only may living cysts be so treated, but also those in which, following the death of the parasite, the contents are partly solidified.

At the present time it is no doubt safer to treat by the older method cysts in which suppuration has occurred, but even in these it may eventually be possible to thoroughly scrape and antisepticise the interior, after evacuation of the pus, and then to close the wound.

In conclusion, also, I would suggest, in suppurating cysts, or in abscess of the liver, that an exploratory abdominal section should be the first step, in preference to the introduction of a needle, for in this way it is sometimes possible to ascertain and locate the presence of a small area of adhesion to the diaphragm or abdominal wall over a suppurating cyst or abscess, and the latter can then be incised and drained through this area by means of a second incision between the ribs or through the abdominal wall.

Since this was written I have operated on two more cases of liver hydatids by the method of evacuation without drainage, with rapid convalescence in both instances.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, Etc.

AN OPERATION FOR THE RADICAL CURE OF HERNIA.

MR. GREIG SMITH, in pointing out the difference of the kinds of adhesions, has explained the reason why a most unscientific operation which I do for the radical cure of hernia gives me such excellent results. Briefly described, when the operation is deliberately undertaken I make a vertical incision, and take great care to keep outside the peritoneum. Then search for the ring, invaginate the sac on my finger, keep it there by means of a large Spencer Wells forceps, and stitch up in a jumble the opening in the abdominal wall (namely, muscle, fibrous tissue, and peritoneum; I like my needle to scrape the bone). then the skin incision. Such is the operation I do in a femoral hernia. In a strangulated femoral hernia I insert a flat broad and thick director through the opening on the femoral vein side, and pass it right round the sac, keeping outside if I possibly can (I never nick Gimbernat's ligament), reduce the hernia, and stitch up in the above way.

In inguinal I do the same thing, that is, keep outside the sac, do not bother about separating the sac from the cord, pass the director into the abdomen on the outer side of sac, reduce the hernia, ligature the neck of the sac, and leave it lying on the inner side of the canal, so as not to squeeze the cord so tightly, and stitch up carefully in the same clumsy fashion. Judging from results the operation has been very successful in my hands. I have done nineteen (femoral) radical cures and seven strangulated herniæ (four femoral and three inguinal), with one death, which was due to gangrene of the bowel. None of these patients wear trusses, as they do not need them. I have done these operations during the last three years, and got the hint for this clumsy fashion of stitching from Lawson Tait and Martin (of Berlin), both of whom respect the peritoneum very little. All these operations were done without antiseptics, and some in very unhygienic surroundings.

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