PAPILLIFEROUS CYST FROM AN AXILLARY SUDORIPAROUS GLAND.

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A CASE illustrating this rare condition came under my care in June last, and presented the following features:

A single woman, aged 22, attended my out-patients' department at St. Thomas's, and complained that during the previous two years a lump had been growing in her armpit; its progress had been slow and not attended by any discomfort until the last fortnight, when it had become painful. Examination disclosed at the dome of the right axilla and rather to its outer wall a convex lump about the size of a pigeon's egg with its long axis corresponding to that of the arm. The skin was unaltered but stretched over it, and free all over except at one point, which agreed with a slight depression, the apparent opening of a duct of one of the axillary sudoriparous glands. The lump was in the substance of the skin, and they together could be lifted up from the subjacent fascia; there was evident elasticity denoting fluid, which latter was confirmed by the marked translucency of the tumour. Having had a previous case, as noted below, I made a correct diagnosis and proved the same by its removal. Section showed it to be a skin cyst consisting of one large cavity containing a thin watery fluid; the lining was in general smooth, but over an area the size of a sixpence soft papillary growths were attached.

Histologically the connective tissue of the cyst wall is seen to be sharply defined from its epithelial lining. The latter over the main part of the cyst consists of two or three layers of cubical cells flattened by pressure. The papillary processes show a many-layered epithelium, the surface cells being swollen and vacuolated, as is frequently seen in secreting glands. The appearances suggest an origin from that portion of the duct between the epidermis and the coiled tube. The tubes of the coil in places are dilated, but without any papillary growths.

This class of cyst appears to be very rare, for any literature bearing on the subject is extremely scanty. Curiously my other case¹ was almost identical.

This was from a little girl aged 13, and the tumour was the size of a Barcelona nut, and situated in the outer wall of the axilla. On examination it proved to be multilocular, with one cyst much larger than the others; from several spots on the wall of the largest cyst were sprouting papillary growths which histologically showed a fibrous core upon which were placed layers of a stratified epithelium with the surface cells vacuolated. The contained fluid was thin and clear like water.

Dr. H. D. Rolleston² records a very similar case where the tumour was situated over the left parotid region.

Unna, in his work on the *Histo-pathology of the Skin*, says that cysts of the sudoriparous glands are only known of the duct and not of the coil. Small cysts, generally related with scars, may arise within the epithelial layer, and he terms these "poro-cysts." Cysts from the other part of the duct are placed in the corium, and contain sweat "hydracystoma": there is no reference to these latter having papillary growths.

It is very evident that in this condition we have to deal with retention cysts of the gland, and there is no more likely place in the body for such to occur than the axilla, where the glands are so well developed and the possibilities of blocking

of the duct with dirt so great. Dr. Rolleston compares the appearances with those seen in a duct-papilloma of the breast. In both cases, no doubt, irritating material enters via the duct, and sets up such surface change as to cause the formation of the papillary growths: retention of the secretion, when it occurs, is brought about by the papillary growths and maintained by the cyst tension, causing distortion of the duct.

REFERENCES.

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TRAUMATIC RUPTURE OF THE SMALL INTESTINE.

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THE following two cases of the small intestine are suggestive. In both of them the intestine was ruptured as the result of external violence, but in neither of them was there any external wound. Both of them were treated by laparotomy; the one recovered, the other died shortly after removal from the theatre.

CASE I.

History.—R. L., aged 13, was swinging on a rope fixed to two gateposts, when they collapsed, and portion of a wall fell upon her, striking the pelvis and abdomen. The accident occurred on April 17th, 1900, at 2.30 p.m.

Condition on Admission.—When admitted she was suffering from Colles's fracture of the right wrist, some haemorrhage from the vagina, and a contusion of the left hip. The next day she complained of pain in the body, and at midnight I was sent for. The pain had been getting worse during the day, and now the abdominal wall was rigid and there was great tenderness over the lower part. Below the iliac spines the resonance was impaired, and there was a doubtful thrill. The urine passed had been free from blood, and the bowels had not been open since admission. The pulse had risen from 100 to 120. The cause of the peritonitis was suspected to be perforation of a hollow viscus, possibly the bladder.

Operation.—At 2.30 a.m. on April 19th, or 36 hours after the injury, median laparotomy was performed. Extravasated blood was found in the subperitoneal tissues. On opening the peritoneum pus escaped, but no gas. The intestinal coils were found matted together with yellow lymph, and very offensive pus lay between them. This was wiped away gradually as the coils were separated towards the pelvis. At last a portion of bowel was seen with a hole in it from which bloody faeces were exuding. This portion was at once separated and drawn outside, and further escape of its contents prevented, whilst the cleansing away of the pus continued until the lowest collection containing faeces was found in Douglas's pouch. When the disturbed parts had been well cleansed, the hole in the small intestine, through which a pea could have been passed, and which was situated opposite the mesenteric attachment, was closed by a single catgut suture, and two continuous Lembert sutures applied longitudinally made all safe. The lumen was considerably narrowed. The kidney pouches were now wiped out—and the left one needed it. Gauze drains were carried down to both, and another, as well as a rubber tube, were inserted into Douglas's pouch. The damaged coil was placed beneath the wound, which was then closed.

Progress.—For two days the patient's condition was very uncertain. She was very noisy and restless, complained of great pain in the body, and vomited occasionally, but the pulse showed a tendency to fall. On the 21st she was distinctly better, and had two spontaneous evacuations. On the 22nd the gauze drains were removed, and from this date her progress to convalescence was uninterrupted. She left the hospital well on June 6th.

Result.—All trouble, however, was not at an end when she ceased to attend hospital. For a long time she had good health, but in January, 1902, nearly two years after the operation, and after a week of abdominal pain an abscess pointed in the abdominal cicatrix, and burst, and a large quantity of most offensive matter escaped. The opening closed in about three weeks, and there has been no local trouble since. It does not appear that this abscess was associated with a silk suture in the parietes, but it is very possible that the Lembert sutures in the gut had something to do with it. The abdomen now looks quite healthy. There is no protrusion at the cicatrix, and there is no induration or thickening to be felt. Though at present the patient suffers from pain and vomiting after food, suggestive of stomach ulcer, and easily controlled by simple treatment, the only inconvenience which can be definitely attributed to the injury is the pain which follows the taking of aperients. This is no doubt due to the intestinal adhesions resulting from the peritonitis.

CASE II.

History.—R. J. W., aged 21, was run over by a bus across the lower part of the abdomen on Christmas Day, 1899. He was admitted to hospital late the same night in a state of partial collapse, and recovered fairly, but in the morning his condition caused anxiety, and I was sent for.

State on Examination.—His facial expression was typical of abdominal suffering; the pulse was 140 and the hands cold. There was diffused abdominal pain but no particular tenderness, and in the right lumbar and iliac regions there was dullness and a fluid thrill. There had been some vomiting; the urine contained a trace of albumen. After a consultation operation was decided upon.

Operation.—The incision commenced in the right linea semilunaris over the dull area had in the course of the operation to be carried across the right rectus and upwards in the median line. On opening the peritoneum bloody serum escaped and the caecum was found distended. The small intestine was then traced from the ileo-caecal valve to the termination of the duodenum, and the higher it was traced the more evident did the signs of trouble become. At last a longitudinal rent 1 in. long was found just at the duodeno-jejunal junction. The torn edges of the mucous membrane were protruded and everted. Much intestinal fluid was escaping, and the peritoneum in the neighbourhood was strewn with currants and peas. It was impossible to get at the rupture to suture it until the reflexion of peritoneum lying over the duodenum and continuous with the transverse mesocolon was torn through so as to liberate the fourth part of the duodenum. Then the opening could be manipulated and was closed with a double continuous Lembert suture. The abdomen was next washed out and finally closed, except for a Keith drainage tube in the pelvis, and a gauze drain and indiarubber tube leading to the seat of the rupture.

Result.—At the close of the operation the patient was moribund, and he died an hour later.

REMARKS.

A recovery after operation for traumatic rupture of the bowel is always a matter of gratification to the surgeon. Superficially these cases resemble perforation of the bowel by bullet wound, but in reality there is a great difference. In a penetrating bullet wound of the abdomen there is no hesitation as to the proper course to pursue—at any rate in civil surgery. The almost absolute certainty that some viscus has been wounded renders immediate exploration imperative.

But the symptoms produced by abdominal contusion when the bowel has been ruptured are not infrequently insidious in their onset. In some cases the profoundness of the collapse and the urgency of the symptoms leave no room for hesitation, but in others the immediate effect of the accident is recovered from, and the surgeon, having excluded to his satisfaction injury to the other abdominal viscera, spends a period of some anxiety before the development of symptoms justifies an exploratory operation.

It is the time that is lost in this way that is responsible for the great want of success in the treatment of ruptured intestine. Yet it is impossible to prevent it unless a rule be formulated that every severe abdominal contusion should be subjected to immediate laparotomy. But there would be few surgeons who would not feel that such a rule would be quite unjustifiable, for it would lead to much unnecessary operating.

The presence of abdominal rigidity in these cases may appear to the surgeon to be easily explained by the contusion of the abdominal muscles. Indeed the patient's behaviour when the abdomen is gently palpated is often convincing, though there cannot fail to remain an uncomfortable uncertainty that the cause of the rigidity may be twofold. The increasing rapidity of the pulse to which Mr. Makins has attached great importance as an indication for operation is undoubtedly a most important sign, but as it almost certainly indicates the absorption of toxins from the peritoneum it means that valuable time has already been lost. But in not a few cases the occurrence of vomiting, sometimes of a severe character, has begun very early.

I am beginning to attach a great deal of importance to vomiting after abdominal contusion. It is true that, even in cases of rupture of the bowel, it is not always present until unsatisfactory conditions are well advanced, but in doubtful cases where a ruptured intestine is suspected, when the quiescent period following recovery from initial shock—if that has been present—is reached, the occurrence of vomiting, pointing to the probable implication of the peritoneum, may be the first sign upon which a fair amount of reliance can be placed. It may occur some time before the pulse-rate has advanced sufficiently to make it quite clear that the increased frequency is not due to subsidiary causes.

In cases, therefore, where the nature of the injury was such as to make a rupture of the bowel not unlikely, the onset of vomiting, when the patient had apparently rallied from the immediate effects of the accident, would justify, in my opinion, an exploratory operation; nor should I have any doubt as to its propriety if, in addition to the vomiting, the pulse showed a tendency, however slight, to rise.

A NOTE ON PERINEAL LITHOLAPAXY.

(KEITH'S MODIFICATION.)

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ALTHOUGH it is now more than ten years since this most useful modification of litholapaxy was first described,¹ and several surgeons have since published large series of cases² showing excellent results, the operation has not met with that general acceptance which might have been expected.

This may, perhaps, be attributed chiefly to two causes. In the first place, it has suffered by a confusion with the more serious procedure associated with the name of Dolbeau, an operation more nearly allied to perineal lithotomy than litholapaxy; in the second there is, so far as I am aware, no description of the method under consideration in any standard work on surgery. The latest textbooks at my disposal contain no reference to the subject, though they were all published long after Brigade-Surgeon Keith's articles,¹ and it may therefore be of sufficient general interest to review briefly the present position of the operation.

Even in India its employment is by no means universal; it was stated not long ago that no considerable headway had been made in the Punjab, and in the Bombay Presidency it is probable that there are many hospitals where perineal litholapaxy has never been performed. On the other hand, those who have once adopted the method are, without exception, enthusiastic in its praise.² Litholapaxy in children is always a somewhat anxious undertaking, and the relief afforded by this alternative in difficult cases, which would otherwise often have to be relegated to one of the more extensive cutting operations, is necessarily very much appreciated. It is in stone in children that its application chiefly lies; contrary to what anatomical descriptions would lead one to expect the most difficult part of a child's urethra, after the meatus, is often well in front of the membranous portion,³ and in these cases the shorter route solves the difficulty.

Perineal litholapaxy has been steadily performed in Hyderabad. Scinde; in 1900 Lieutenant-Colonel W. H. Henderson, I.M.S., published his series of 110 cases,⁴ with 3 deaths, and the records of the Civil Hospital there (kindly placed at my disposal by Captain T. Jackson, I.M.S.) now show a total of 447 cases, with 18 deaths. From various other sources I have collected a few more cases, which make, with the Hyderabad figures, a total of 458 cases and 18 deaths. It is necessary to remark that the great majority of these represent stones, which, for one reason or another, would have otherwise been dealt with by some form of lithotomy, and that they also include the early operations of a number of surgeons; in fact they may stand for a fair average, and are therefore less likely to prove misleading than the statistics of one peculiarly expert operator. My own experience of perineal litholapaxy is limited to six cases in children, all of which recovered; in two, however, on account partly of prolonged manipulation, partly of the weak condition of the child, the wound did not heal readily, and convalescence was protracted. These were both instances which might have benefited by drainage, and probably a lateral lithotomy would have been preferable for this reason.

The following may be taken as fair examples of uncomplicated cases. It will be seen that recovery is very rapid, and that often only a few drops of urine escape from the wound. Lieutenant-Colonel R. Baker, I.M.S., observes that children used to run about the ward on the day following operation, and I believe Brigade-Surgeon Keith often found that no urine whatever was passed from the opening, and that the sheet on which the patient lay remained perfectly dry. Other advantages which the latter claims for this over the ordinary cutting operations are voluntary micturition, absence of shock, and non-interference with the sexual powers.

CASE I.—A Hindu child, aged 3½ years. The smallest instrument available could not be passed through the penile urethra. The stone weighed 28 gr. Urine ceased to pass through the wound on the second day, and he was discharged cured on the ninth day after operation.

CASE II.—A Hindu child of 6 years. The perineal operation was performed for the same reason as in Case I. The stone weighed 42 gr. Urine ceased to pass by the wound after twenty-four hours, and he was discharged cured on the fifth day after operation.