II.

Lithopædion, Retained 15 Years, Causing Acute Intestinal Obstruction.

By J. W. SMITH, F.R.C.S., C.M.,

*Hon. Assistant Surgeon, Manchester Royal Infirmary; Lecturer,
Operative Surgery, University of Manchester.*

MRS. E.B., æt. 40, was admitted to the Manchester Royal Infirmary at 5 p.m., on November 1st, 1907. She was accompanied by her medical attendant, Dr. Reginald Smith of Warrington, to whom I am indebted for the following notes of her history:—

“Born August 1867; commenced menstruating at age of 12; was considered a robust girl and menstruated regularly. In February 1892 she was ‘a fortnight past her period’ when she began, as her people thought, to menstruate, and was suddenly seized with severe pain in the abdomen and collapse. Her mother remembers well that this sudden onset occurred six weeks after her last normal period. My father, the late T. Starkey Smith, attended her. She was in bed for 13 weeks. No operation was performed. She was married in May 1892, when she was only just recovering from this acute illness, having a good deal of œdema of the legs. Her abdomen became enlarged, and pregnancy was suspected. My father examined her and told them he could feel something in the abdomen but that, if she were pregnant, the child was probably dead. She had amenorrhœa 2 or 3 months after marriage. The swelling of the abdomen gradually subsided. Since then menstruation has always been regular, and, though not strong, she has enjoyed fair health, her only illness being epidemic diarrhœa in 1906. The present illness began with symptoms of intestinal obstruction about five days before her admission to hospital; she had bilious vomiting, which became fœcal on the morning of November 1st, and her general condition grew much worse. The family history shows nothing worthy of note.”

Condition on admission. She had the “acute abdominal facies.” Temperature normal. Pulse 130. Abdomen distended and tympanitic. On deep palpation an irregular mass could be made out in the lower part, covered by distended bowel, and was only to be felt by pushing the intestine aside. It rose nearly as high as the umbilicus and extended almost across the abdomen. Rounded nodular bosses could be felt on the right and left (the left one proved to be the dorsal prominence of the fœtus, the other its right forearm). The mass

appeared to descend into the pelvis and was firmly fixed. It was so hard that I remarked to the students present that I supposed we must be dealing with a large calcified uterine fibroid, but that it felt hard enough to be a bony tumour springing from the sacral promontory. No vaginal examination was made, as she had been placed on the operating table when I first saw her—the general condition being so urgent.

Operation—5.30 p.m. On opening the abdomen by a median incision many distended, congested coils of intestines presented. By holding these aside with guards the bony boss at the dorsal flexure of the foetus was brought into view on the patient's left. The intestine and omentum were everywhere adherent to the bony foetus, but the adhesions could be peeled off with a swab, and did not bleed materially. Gradually the whole of the lower half of the foetus was cleared. Tags of omentum were tightly wrapped round the two limbs (right arm and left leg), which protruded with an interspace from the body mass. These had to be disentangled. All this was done to try and discover the constricted piece of bowel, but the whole of the small intestine appeared to be distended, and it became evident that it would be necessary to remove the foetus entirely to remedy the obstruction. The foetal head and neck descended into the left side of the pelvis and were most firmly fixed. The head apparently passed out of the peritoneal cavity into the left broad ligament. It was embedded in thick fibrous tissue, to which it was very adherent. This tissue was peeled off, and the foetus removed. The constriction in the intestine was then found to be in the ileum, 2 inches from the ileo-cæcal valve, a portion of which, $\frac{3}{4}$ inch wide, had been tightly compressed, apparently by the right lower limb of the foetus. The constricted gut, though considerably damaged, appeared to be viable. The blood in the peritoneum and pelvis was now wiped out when a rounded hard mass was discovered on the right side of the pelvis. This was the calcified placenta, embedded in a capsule of fibrous tissue, and was quickly enucleated.

As the cellular tissue of the pelvis had been widely opened up on both sides, a vaginal drain was deemed necessary. A long beaked forceps was pushed through the posterior vaginal wall from below, and a large-sized tube pulled through Douglas's pouch from the abdominal incision. The wound in the abdominal wall was then sutured with silkworm gut.

The operation lasted 35 minutes, and the patient's condition at its close was fairly satisfactory. She recovered from the anæsthetic and remained very much *in statu quo* for some hours. Saline injections per rectum were given and strychnine hypodermically. At 10.30 p.m. she was lifted up into a half-sitting position. Shortly afterwards a copious evacuation of the bowels occurred, suddenly

deluging the bed with liquid fæces. She collapsed immediately, became pulseless, and died in a few minutes.

The lithopædion (see plate) is of the shape of an inverted **L** owing to a rectangular flexure of the fœtus in the dorsal region. Length 11 inches; 6 inches from head to flexure; 5 inches below. Weight 1 lb. 5 oz. The whole is hard and calcified, but the dorsal flexure and the folds of the neck and abdomen are covered by irregular plates of what looks like a growth of new bony tissue, superimposed on the original fœtus. These portions are whiter and more shiny than the remainder, with a surface as though covered by a thin layer of cartilage, indeed the dorsal hump has all the appearances of the cartilage covered surface of an epiphyseal exostosis. The head is the hardest and most like bone, whilst the two limbs (right upper and left lower) which stand out from the body mass are the least altered. In these the individual bones and digits can be distinguished, and slight movement of the knee joint is possible.

Head—diameters: vertical $3\frac{1}{2}$ in.; antero-posterior $2\frac{1}{2}$ in.; transverse $2\frac{1}{4}$ in. Posteriorly there is a prominent mesial crest, which divides at the vertex into lateral ridges bounding a triangular flattened frontal area. There are no signs of sutures or individual bones of the skull, and no indication of the face, orbit, or mouth; nor is there any differentiation of the head from the neck.

Upper limbs. *Right*, becomes distinct from the body mass below the shoulder. Elbow fully flexed; wrist hyperflexed in the radial direction so that the digits are in contact with the thorax internal to the shoulder. *Left*, elbow projects from the side; forearm flexed and in contact with upper arm. The hand has vanished or become fused with the right foot, which is immediately adjacent and united to the neck.

Lower limbs. Both are fully flexed at the hip joints. *Right*, extended obliquely across the trunk, the thigh crossing the front of the abdomen, and the leg the left side of the chest. Foot flexed forwards in the fold of the neck. The whole limb is flattened out on the trunk and fused with it. *Left*, the thigh is flexed forwards and inwards in front of the right knee, which it touches. The leg lies across the back of the opposite thigh, the ankle touching the right buttock. Ankle fully flexed on the leg, and the foot is again acutely flexed at the midtarsal joint. There is slight movement of the knee joint.

Placenta. Weight 5 ozs. Measures 3 in. $\times$ $2\frac{1}{2}$ in. $\times$ 2 in.; has the shape of a blunt rounded kidney, the outer (maternal) surface showing some trace of lobulation, the hilus being the fœtal surface in-folded. Fibrous tissue adheres closely to the surface. The mass, though calcareous, is not very hard, and at more than one point there is a tendency to crumbling.

Lithopædion and placenta, arranged to indicate their relative positions as found in the abdomen. Slightly larger than half size.

The explicit history obtained by Dr. R. Smith makes it evident that the fœtus had, in this case, been retained in the abdomen for a period of 15½ years. Impregnation occurred at the beginning of 1892; the gestation was tubal and ruptured at the end of the sixth week. This was accompanied by intra-peritoneal hæmorrhage, but, as the fœtus survived the rupture, it is almost certain that the amniotic sac must have escaped damage. The fœtus, thus set free in the peritoneal cavity, continued to develop until the sixth or seventh month. Its death was not accompanied by any of the phenomena of false labour, and no decidual membrane appears to have been passed. The fœtus became ultimately separated some distance from the placenta, the head occupying the left side of the pelvis, the placenta the right. No trace of umbilical cord or membranes remained. The survival and calcification of the placenta appear to be of rare occurrence, as in many of the recorded cases of lithopædion no mention is made of traces of the placenta having been found.

From its surgical aspect the case is one of great interest and rarity; indeed, I have not been able to find a previously recorded case of obstruction thus caused. That acute obstruction should occur after the fœtus had lain so many years in the peritoneal cavity without causing previous trouble would appear unlikely; but it is well known that intraperitoneal conditions inviting strangulation or constriction of intestine may exist for long periods or from birth, and that ultimately obstruction may suddenly supervene, doubtless owing to some unusual movement of intestine, without other physical alteration of the abdominal contents.

The fatal termination was disappointing, as after the operation there appeared to be no reason why the patient should not recover, but, where obstruction and abdominal distension have lasted for some days, sudden collapse after rapid evacuation of the intestine is not infrequent, and those who have to deal with many of these cases will be familiar with this mode of death.