obvious promontory permitted the axis of the expulsive forces to lie nearly vertical, thus resulting in increase in the lateral flexion of the head (see Fig. 2). (5) The antero-posterior depth of the cavity was such that the deflection of the head by the sacral curve and consequent correction of asynclitism could not take place until the posterior shoulder was impacted against the sacrum. By this time the head was so wedged against the lateral pelvic walls that spontaneous correction and delivery had become impossible.

COMMENT

That the malpresentation described above is extremely rare seems to be due to the factors involved in its production. These are: (1) the relatively small baby; (2) a relatively roomy pelvis, particularly in the antero-posterior diameter; and (3) a low angle of inclination of the pelvic brim.

No opinion can be formed concerning the part played by the musculature of the pelvic floor in the mechanism of this presentation, since in the case described by Walker (1928) the mother was a 2-para. It is not certain that there is any significance in the lateral siting of the placenta.

The manipulation described, carried out under general anaesthesia, resulted in the effortless forceps delivery of a live infant.

I am indebted to Mr. D. J. P. O'Meara for permission to publish this case, and to Dr. S. Mitra, consultant radiologist, for his help with the pelvimetry.

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Acquired Mucocele of the Gall-bladder in Childhood

Acute disease of the gall-bladder is uncommon in childhood. The following two cases occurred in children under the age of 4 years admitted to Cardiff Royal Infirmary. One case has already been described by Narat (1940).

CASE 1

A boy aged 24 months was admitted as an emergency. He had been quite well until four days before this, when he started to vomit. Next day he appeared to have attacks of colic, which caused him to pull up his knees when lying down; these attacks of pain persisted until he came to hospital. During this period three or four bowel evacuations occurred daily, the stools being loose and yellow.

On examination his temperature was 97.6° F. (36.4° C.), pulse 74, and respirations 24. The child was pale and lay quietly in his cot, sleeping fitfully; his tongue was furred. Abdominal examination was not resented except for palpation in the right hypochondrium; here there was marked guarding, and when this was relaxed during the brief intervals of sleep a mass could be felt extending for 1 in. (2.5 cm.) below the inferior margin of the right lobe of the liver, but not extending to the midline. Rectal examination was negative. Barium enema showed a filling defect in the transverse colon near the hepatic flexure.

It was decided to explore the abdomen on account of the presence of the tender mass. At laparotomy by right paramedian para-umbilical approach the gall-bladder was found to be tensely distended and injected. It could not be emptied by compression, and when aspirated to facilitate exposure of the cystic duct 45 ml. of faintly bile-stained mucus was withdrawn. Dissection in the free border of the lesser omentum revealed a fine pale atretic cystic duct. The hepatic and common bile ducts were pale and narrow; and adjacent to the common bile duct above the duodenum was an enlarged lymph node. Cholecystectomy was performed. Post-operative progress was uneventful and the child was discharged on the ninth day.

Histologically the gall-bladder showed acute inflammatory changes. The small fragile cystic duct was too traumatized by the crushing clamps to yield useful material for section.

Conclusion.—The fundamental lesion here appeared to be a congenital atresia of the cystic duct associated with a lesser degree of atresia of all the extrahepatic duct system. Patency of the cystic duct was suggested by the faint bile-staining of the gall-bladder contents; otherwise it must have been due to a small accessory hepatic duct draining direct into the gall-bladder. The hepatic and common bile ducts were hypoplastic, and sufficient lumen must have been present, as the child was not jaundiced.

CASE 2

A boy aged 41 months; emergency admission. Three days before admission the child developed attacks of colicky abdominal pain, each of some five minutes' duration with remissions of about 15 minutes. On the following day he vomited several times. There was no change of bowel habit. Two years previously, at the age of 17 months, the child had been admitted to another hospital for investigation because he was failing to progress. At this time the duodenal juices showed absent tryptic activity. Fibrocystic disease of the pancreas was diagnosed and the patient treated with pancreatic extract.

On examination his temperature was 98° F. (36.7° C.), pulse 100, and respirations 26. The child was small for his age, and did not appear unduly ill. Abdominal examination revealed marked tenderness in the right hypochondrium, but no mass could be felt distinct from the liver, which was slightly enlarged. Rectal examination was inconclusive. A barium enema was performed, and, while no gross abnormality was found on screening, on one of the films taken the shadow of the transverse colon appeared to be indented near the hepatic flexure.

It was decided to explore the abdomen because of the history of pain and the presence of tenderness. At laparotomy, carried out by a right paramedian para-umbilical incision, the gall-bladder was found to be tensely distended, injected, and in some areas infarcted. It could not be emptied by compression, and, to facilitate manipulation, aspiration was performed, 45 ml. of viscid colourless mucus being withdrawn. The distension of the gall-bladder stopped short at the cystic duct, which, together with the other extrahepatic biliary ducts exposed by dissection in the free border of the lesser omentum, appeared entirely normal. Cholecystectomy was performed. Post-operative progress, apart from mild bronchitis, was uneventful.

On section the gall-bladder walls were found to be congested and oedematous, with several areas of infarction, but no cause of cystic duct obstruction could be found. Microscopically there were inflammatory changes consisting of eosinophil leucocyte infiltration and areas of fibrinoid necrosis, in some places involving the walls of the blood vessels.

Post-operative Investigations.—Blood: red cells, 4,960,000; haemoglobin, 63%; colour index, 0.6; white cells, 15,700 (polymorphs 79%, lymphocytes 11%, monocytes 10%). Urine: reaction, acid; albumin, nil; deposit, a very occasional leucocyte only. Fluid from the gall-bladder: a few pus cells and some debris; no organisms seen. Serum agglutinin titre: nil for typhoid O and H, paratyphoid BO and BH, and non-specific Salmonella H. Rectal swab: coliform colonies, rough and untypable. Stool culture: No pathogens isolated. Faecal tryptic activity: detected at dilution of 1:2,560. Duodenal juices: specimens 1 and 2, no tryptic activity detected; specimens 3 and 4, slight tryptic activity at dilution 1:1; all four specimens alkaline.

The fundamental lesion in this case was considered to be mucosis associated with mucus-plug obstruction of the cystic duct and fibrocystic disease of the pancreas.

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