PERFORATED MECKEL'S DIVERTICULITIS FOLLOWED BY ILEO-ILEAL INTUSSUSCEPTION IN A YOUNG CHILD

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Section from wall of excised diverticulum. $\times 30$.

During the last 10 years several papers in this country and elsewhere have reviewed the complications of Meckel's diverticulum. In this country Chesterman (1935) was apparently the first to draw attention to the importance in the diagnosis of bleeding per rectum. More recently Moses (1947) reported bleeding as the commonest important complication (occurring more frequently than obstruction or perforation), Aird (1949), too, has stated that melaena is the commonest symptom in children who suffer from peptic ulceration of this diverticulum, while Walton and Lill (1952) have also stressed the diagnostic importance of haemorrhage. Ward-McQuaid (1950), however, found only one case in a series of 18 in which haemorrhage was the leading symptom. Hashemian and Murray (1954) and Annamunthodo (1955) have reviewed in detail the complications which can occur.

The occurrence in a boy of four of a perforated Meckel's diverticulitis, in whom bleeding per rectum was the first evidence of the condition, is not in itself so very uncommon. When followed, however, at an interval of more than a week by an ileo-ileal intussusception, apparently unrelated to the diverticulum which had already been removed, this sequence of events constitutes a case record to which no exact parallel has been found in the literature. Ileo-ileal intussusception is itself relatively uncommon in children, occurring in only 5 per cent. of 610 cases of intussusception reported by Gross and Ware (1948). The following case has been thought worthy of record:

Case Report

On March 5, 1955, a boy of four and a half years was sent to hospital with a history of passing black stools for the past four days. His own doctor had

Section from wall of excised diverticulum. $\times 138$.

seen him three days prior to admission and had prescribed iron tablets because of rectal bleeding. The day before admission he complained of central abdominal pain, but there had been no nausea or vomiting.

On examination, his temperature was 101.8, pulse 160, respiration 22. His tongue was furred and dry with marked foetor. There was widespread tenderness and resistance in the lower abdomen, but no true rigidity; there was very marked tenderness on rectal examination. A provisional diagnosis by the Casualty Officer (Dr. K. Jayewardene) of Meckel's diverticulitis was confirmed and he was admitted for operation.

Under general anaesthesia (Dr. D. C. F. Banks) the abdomen was opened through a lower right paramedian incision. Free fluid and thin pus welled up from the pelvis. An acutely inflamed tense Meckel's diverticulum was found about 2 ft. from the ileo-caecal valve on the anti-mesenteric border of the ileum, measuring about $\frac{1}{2}$ in. (1.25 cm.) in diameter. A whiplash band extended from its summit to nearby mesenteric glands and at the base of the diverticulum on the under surface was a tiny perforation through which thin pus was leaking. The diverticulum was resected and the ileal opening closed transversely in two layers with catgut. A normal appendix was removed. After peritoneal toilet the wound was closed in layers without drainage.

Post-operatively terramycin was given by intra-

venous infusion and bowel sounds were audible the day after operation. He continued to make good progress until the ninth post-operative day when he started vomiting and there was increasing abdominal distension. This was not accompanied by any definite abdominal pain or rigidity, but an enema produced no result. A diagnosis of intestinal obstruction was made.

Second Operation (Mr. I. Matheson)

The abdomen was reopened through the previous incision and grossly distended small bowel was found with an ileo-ileal intussusception. This was situated about 2 ft. from the ileo-caecal valve; about 4 in. of ileum was found invaginated, this being easily reduced. The healing suture line at the original site of the Meckel's diverticulum was involved in the intussusception, but was not at its apex, nor was any other abnormality found. Aspiration of small bowel contents was undertaken by syringe and needle, the needle puncture being closed by purse string suture. While deep tension sutures were being inserted the small bowel was accidentally pricked with consequent peritoneal soiling; a further purse string suture was inserted.

On return to the ward his condition was satisfactory and a subcutaneous saline-hylase infusion was set up. Eighteen hours after operation he collapsed and died suddenly. Coroner's post-mortem did not reveal any other or new abnormality.

Pathological Report on the Excised Diverticulum (Dr. E. Bailey)

'The specimen consists of an opened diverticulum 1.5 cm. in diameter. No evidence of perforation could be seen in the opened specimen. Section shows the presence of a diverticulum of the bowel partly lined by small intestine epithelium and partly by gastric mucosa. An ulcer is present in the vicinity of the junction of these two types of tissue and an acute inflammatory reaction extends from this site to the peritoneal coat.'

Summary

The case history is reported of a boy of four years who died following the reduction of an ileo-ileal intussusception which supervened shortly on the excision of a perforated Meckel's diverticulum. There was no apparent link between these two conditions.

Attention is again drawn to the importance of rectal bleeding as a presenting symptom of Meckel's diverticulitis.

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Books Received

The Editorial Board acknowledge with thanks receipt of the following volumes. A selection from these will be made for review.

- 'Statistics of Therapeutic Trials.' By G. Herdon, M.Sc., Ph.D., LL.D. Pp. xvi + 367. London: Cleaver-Hume Press, Ltd. 1955. 50s.
'Dextran.' By J. R. Squire, M.D., F.R.C.P., J. P. Bull, M.D., W. d'A. Maycock, M.D., and C. R. Ricketts, Ph.D., F.R.I.C. Pp. 91. Oxford: Blackwell Scientific Publications. 1955. 15s.
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