Recurrent acute retrograde intragastric intussusception

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SUMMARY A case of recurrent acute retrograde jejunogastric intussusception is described in a 45-year-old man who five years previously had had an antecolic gastrojejunostomy.

Two previous haematemases imply that this complication was recurrent and self reducing an unusual and fortuitous outcome.

Awareness of the possibility of acute intussusception following gastroenterostomy or partial gastrectomy is stressed.

Wolfler is credited with the first gastroenterostomy in 1881 (Caudell and Lee, 1955). It was nearly 25 years later before the complication of retrograde intragastric intussusception was reported (Bozzi, 1914; Steber, 1917). The first authoritative review appeared in the *New England Journal of Medicine* in 1928 (White and Jankelson) and many case reports have been documented since then, so that 111 such patients had been reported by the time Conklin and Marlowitz (1965) added three patients in a recent comprehensive review.

Whilst chronic recurrent retrograde intragastric intussusception is being increasingly recognized (Caudell and Lee, 1955), recurrent acute intussusception with bleeding does not seem to have been previously reported.

Case Report

J.N., a 45-year-old Irishman, was admitted to this hospital on 1 February 1970. He had had a gastroenterostomy performed for duodenal ulceration in November 1964. On 19 July 1969 he was admitted to another hospital with a 24-hour history of severe epigastric pain followed by haematemesis. On admission the notes recorded a pulse of 80 per minute and a blood

pressure of 115/90 mm Hg. A mass was palpable in the epigastrium. He was transfused with 4 pints of blood and the pain subsided. His subsequent stay in hospital was uneventful and he was discharged home on 29 July. A barium meal was performed on 12 August and showed a normally functioning gastroenterostomy (Fig. 1). In September 1969 the patient had a further episode of epigastric pain and haematemesis which was again treated conservatively without admission to hospital.

On the morning of the present admission the patient experienced a 'searing' epigastric pain followed by a haematemesis. He looked pale and ill; the pulse was 78, regular, and the blood pressure 120/70 mm Hg. In the abdomen there was the scar of previous operation and a poorly defined mass was palpable in the epigastrium and left hypochondrium. Rectal examination revealed normal faeces. The haemoglobin was 12.6 g/100 ml. A barium meal (Figs. 2 and 3) showed the presence of a large retrograde jejunogastric intussusception. The patient was transfused with 2 pints of blood before operation.

At operation a retrograde intussusception of the efferent loop of jejunum into the stomach was confirmed. The patient had had an antecolic gastrojejunal anastomosis. No ulcer was seen at the stoma or in the duodenum and no entero-anastomosis had been performed. The intussusception was not reducible and 65 cm of intus-

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Fig. 1 August 1969: normally functioning gastroenterostomy.

Fig. 2 February 1970: large retrograde jejuno-gastric intussusception. Note the pathognomonic valvulae conniventes.

suscepted bowel had to be resected. The gastroenterostomy was closed and the continuity of the bowel restored. A vagotomy and pyloroplasty were performed. The postoperative course was uneventful, and the patient was discharged to convalescence on 11 February 1970. He has been reviewed since and remains well.

Discussion

Acute retrograde jejuno-gastric intussusception is a serious complication of gastroenterostomy or partial gastrectomy (Lawson and Whitener, 1950). Eighty-four of the 114 cases reviewed by Conklin and Marklowitz (1965) occurred following gastroenterostomy and 30 after partial gastrectomy. Of the patients who had had a gastroenterostomy, 56 had a retrocolic anastomosis, 12 an antecolic anastomosis, and the nature of the anastomosis was unstated in 14.

The mortality on conservative therapy is high; death occurred in 15 (83%) of the 17 postgastroenterostomy patients so treated. As haematemesis implies venous engorgement in the intussuscepted bowel, and thus self reduction is unlikely, it is remarkable that this patient survived two episodes of bleeding. Spontaneous reduction following haematemesis must be uncommon so

Fig. 3 February 1970: head of the intussusceptum.

it is not surprising that recurrent acute retrograde intragastric intussusception does not appear to have been reported before.

The most obvious aid to diagnosis of this condition is awareness of its existence. The characteristic history is one of short duration, severe, colicky epigastric pain, followed by vomiting which may not initially be bloodstained. On examination the patient may look more ill than the short history suggests, possibly due to gastric distension and fluid and electrolyte loss, in addition to blood loss. There will be a surgical scar in the abdomen indicating a previous operation and a mass may be palpable in the epigastrium. There may be a normal coloured stool on rectal examination suggesting that blood has not been passed on down the gastrointestinal tract. It is important, once the diagnosis is suspected, to have radiographs taken of these patients without delay as early surgery is followed by a mortality of between 10.5% (Lawson and Whitener, 1950) and 18.3% (Conklin and

Marklowitz, 1965), whereas surgery more than 48 hours from the onset of symptoms is associated with a 46.2% mortality rate (Lawson and Whitener, 1950).

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