Pediatr Radiol (2001) 31: 455

Drora Fisher
Irith Hadas-Halpern

Jejunoduodenogastric intussusception – a rare complication of gastrostomy tube migration

Received: 1 January 2001
Accepted: 3 February 2001

Sir,
Gastrointestinal intussusception is usually antegrade. In adults it is usually secondary to mass lesions, while in most children it is idiopathic [1]. Retrograde gastric intussusception is extremely rare and has previously been reported in only five cases. All those cases were secondary to gastrostomy tube migration [2]. We describe a further case caused by gastrostomy tube migration with the diagnosis made by US.

A severely retarded, gastrostomy-fed 14-year-old girl presented to the emergency room with abdominal pain and vomiting. Plain abdominal X-ray showed an enlarged stomach, suggesting gastric outlet obstruction. Abdominal US revealed an enlarged stomach with an antral mass composed of a hyperechoic centre surrounded by a hypoechoic rim; it had the typical doughnut shape on sagittal cut and pseudokidney shape on transverse cut, diagnostic for intussusception (Fig. 1). A water-soluble upper GI contrast study showed a large antral filling defect with the typical coil spring appearance of intussusception (Fig. 2). At laparotomy a retrograde jejunoduodenogastric intussusception was found. A small segment of necrotic bowel required resection. The child recovered uneventfully.

Retrograde intussusception is very rare. It may occur as a complication of gastrostomy tube migration [2]. All five previously reported cases, as well as our case, had distal migration of a gastrostomy tube with obstruction by the balloon. Attempted withdrawal of the tube with the balloon inflated is the proposed mechanism for the intussusception. Migration of the gastrostomy tube may result from inadequate skin fixation. After tube migration through the pylorus and beyond the ligament of Treitz, attempts to withdraw the tube with the inflated balloon may result in retrograde telescoping of the jejunum backwards into the stomach, causing gastric outlet obstruction [2].

In our case, the diagnosis of intussusception was made by US and was confirmed by upper GI examination.

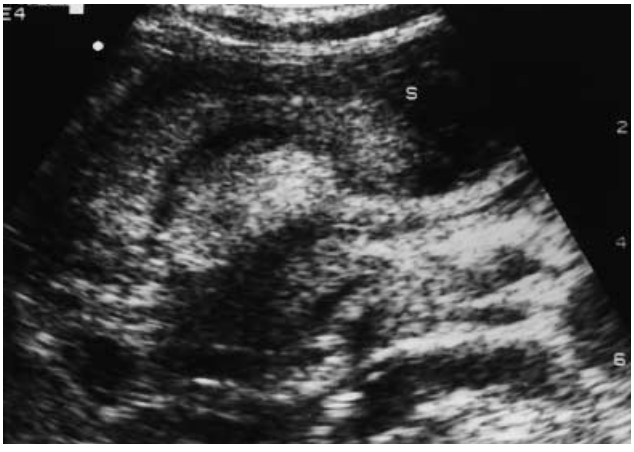

Fig. 1 Longitudinal US at the level of the stomach shows the intussusception within the stomach

Fig. 2 Contrast study shows a large antral defect in the stomach

Jejunoduodenogastric intussusception is a rare complication, which has to be considered in patients with gastrostomy who present with recurrent vomiting. US examination is suggested as the initial examination of choice in such cases.

References

1. Miller SF, Landes AB, Dautenhahn LD, et al (1995) Intussusception: ability of fluoroscopic images obtained during air enemas to depict lead points and other abnormalities. Radiology 197: 493 –496
2. Weber A, Nadel S (1991) CT appearance of retrograde jejunoduodenogastric intussusception: a rare complication of gastrostomy tubes. AJR 156: 957–959

D. Fisher (✉) · I. Hadas-Halpern
Department of Radiology,
Shaare Zedek Medical Center,
PO Box 3235, Jerusalem 91031, Israel
Tel.: + 972-2-6555516
Fax: + 972-2-6555709