Transient intussusception: rare cause of abdominal pain in cystic fibrosis

Suheil Artul, ^{1,2} Faozi Artoul, ³ George Habib, ⁴ Nabil Abboud ⁵

¹Department of Radiology, Nazareth Hospital, Nazareth, Israel

Faculty Medicine in the Galilee, Bar-llan University, Safed Israel, Maghar, Israel Department of Nuclear Medicine, Meir Hospital, Maghar, Israel Department of Medicine, Nazareth Hospital, Nazareth, Israel

⁵Department of Surgery, Nazareth Hospital, Nazareth, Israel

Correspondence to Dr Suheil Artul, suheil_artul@hotmail.com

DESCRIPTION

A 26-year-old man with history of cystic fibrosis, presented to the emergency department with a 2-day history of abdominal pain, nausea and vomiting. The patient did not have a history of abdominal surgery.

On presentation the patient was afebrile and normotensive. Abdominal examination revealed tenderness in the mid-abdomen and no rebound. Laboratory tests showed slight leucocytosis and normal level of amylase. Abdominal plain radiograph showed gaseous distention of multiple small bowel loops. Contrast CT of the abdomen showed total fatty replacement of the pancreas (figure 1, white arrows), dilated small bowel loops up to 4.5 cm in diameter (figure 2, red arrows) and a 'solid mass' of 6 cm in long axis 'cobra head sign' (figure 2, black arrows) indicating ileo-ileal intussusceptions, without any sign of bowel wall suffering such as air or oedema of the involved loop. The patient was treated conservatively and the intussusception resolved spontaneously without any manoeuvre with good clinical outcome.

Cystic fibrosis is the most common lethal autosomal recessive disease in white populations. The abdominal manifestations are now seen throughout childhood, from infancy to adolescence. The child might present in the neonatal period with meconium ileus or its attendant complications. The older patients might present with distal intestinal obstruction syndrome or colonic stricture secondary to high doses of pancreatic enzyme replacement.

Intussusceptions in adults are generally very rare in cystic fibrosis. Only 10 cases have been reported



Figure 1 Contrast-enhanced CT of the abdomen showing total fatty replacement of the pancreas (white arrows).

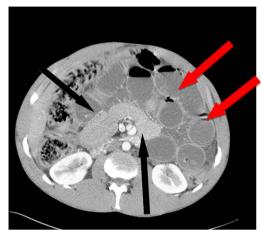


Figure 2 Contrast-enhanced CT of the abdomen showing dilated small bowel loops up to 4.5 cm in diameter (red arrows), a 'solid mass' of 6 cm in long axis 'cobra head sign' (black arrows) indicating ileo-ileal intussusception.

to date, 6 of them by Nash *et al.*³ Unlike our case, in all of these published cases were needed surgical reduction.

Learning points

- ► Adult' intussusception in cystic fibrosis is a very rare cause of abdominal pain.
- ► CT offers unique information about organ involvement and complications of cystic fibrosis such as intussusception.
- ► In cystic fibrosis in adults, intussusceptions can be transients and can resolve spontaneously.

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