

Primary ileoileal intussusception without a lead point simulating appendicular mass in a 4-year-old girl

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DESCRIPTION

A 4-year-old girl presented with a 4-day history of right-lower quadrant and suprapubic abdominal pain, vomiting and low-grade fever. On examination, she was found pale, tachycardic and with intermittent pain. Abdominal examination revealed a palpable tender but mobile mass in the suprapubic area. A clinical diagnosis of appendicular mass secondary to pelvic appendicitis was made. Urine dipstick and microscopy tests were normal. Full blood count was normal but C reactive protein was 30 mg/L. As there was no clinicopathological correlation, an urgent abdominal ultrasound scan was performed. It showed an ileoileal intussusception with classic target/doughnut/bull's eye sign not amenable to air enema reduction (figure 1). She underwent exploratory laparotomy at which a primary ileoileal intussusception was found, which was very difficult to reduce, and had no lead point but a small segment of terminal ileum was non-viable and resection and primary end-to-end anastomosis was performed uneventfully. She was discharged home on third postoperative day and histology did not show any lead point. She presented again in 4 months' time with features of acute adhesive intestinal obstruction for which she underwent laparoscopy, adhesion lysis with segmental resection of terminal ileum with end-to-end ileoileostomy uneventfully. She is well and

asymptomatic at 2 years of follow-up. Primary ileoileal intussusception is rare at 4 years of age; it may simulate appendicular mass and an adult case has been reported, but none in children.¹ An inflammatory pseudotumour may present with intussusception and a normal appendix may form a lead point of an intussusception.^{2 3} Our case illustrates that barium enema reduction of intussusception is obsolete and in fact contraindicated⁴; there are still some cases in which an open traditional emergency surgery has some indications, although, at present, pneumatic air enema reduction is a gold standard, ultrasound-guided and laparoscopy-guided reductions are gaining favour recently.⁵⁻⁸

Learning points

- ▶ Primary intussusception occurs in infancy with peak period between 5 and 9 months of age and is usually ileocolic while its occurrence at 4 years of age and ileoileal location is unusual. The reported sensitivity and specificity of ultrasound scan in the diagnosis of intussusception are almost 100%.
- ▶ Ileoileal intussusceptions beyond 2 years of age usually have a lead point, the commonest being Meckel's diverticulum. Appendicular mass is treated conservatively, followed by interval or no appendicectomy in children, while an intussusception is a strangulating obstruction requiring urgent intervention.
- ▶ If a tender mass is palpable and the inflammatory markers (isolated rise in C reactive protein is an indicator of bowel vascular compromise and inflammation) are not in keeping with appendicular mass, lateral thinking and low threshold for urgent ultrasound to confirm or refute clinical diagnosis help, and air enema reduction is unfortunately not available for this entity and needs an operative intervention.

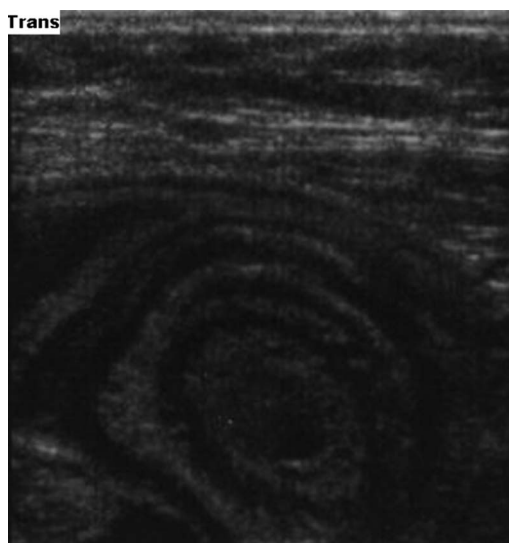


Figure 1 Abdominal ultrasound scan showing typical target/doughnut/bull's eye sign suggestive of an intussusception.



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