

Intussusception

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The Case

A 7-month-old female presented to the emergency department after several hours of listlessness and occasional vomiting. Her last bowel movement was two hours earlier, and was noted to be non-bloody by the mother. Upon physical examination she was noted to be afebrile, with a soft, non-tender, non-distended abdomen with no palpable masses. An abdominal ultrasound was ordered and read as equivocal. An upright abdominal radiograph (Figure 1) was ordered after the ultrasound and demonstrated an absence of bowel gas in the left upper quadrant.



Figure 1: Upright abdominal radiograph demonstrating paucity of bowel gas in the left upper quadrant.

Diagnosis

Intussusception occurs when a proximal portion of intestine telescopes into the lumen of a more distal portion. In the pediatric population, 90% of cases are idiopathic ileocolic, whereas in adults, a mass may serve as a lead point. The typical age range is between 3 months and 3 years and is thought to be due to regional lymphadenitis secondary to viral infection. The textbook presentation consists of abdominal pain, vomiting, currant jelly stools and a palpable right-sided abdominal mass. Since the 1970's there have been several case reports and studies showing lethargy as being part of, if not solely, the initial presentation of intussusception. A nine-year longitudinal study found that 37.5% of the study participants had screaming attacks, lethargy and vomiting as their presenting symptoms [1]; whereas another 6.5 year-long study showed 78% of infants presenting with lethargy, abdominal pain and vomiting [2]. Findings on abdominal radiographs include a paucity of gas within the right abdomen, absence of an air-filled cecum or ascending colon, or the meniscus of a soft tissue mass typically within the ascending or transverse colon. Ultrasound can also be used to identify intussusception which shows alternating hyper and hypoechogenic rings [3]. Abdominal radiograph with a consistent clinical history is found to be 95% specific; whereas, abdominal ultrasound is 93% specific to rule-in intussusception [4]. Treatment consists of air insufflation or barium enema-based image guided reduction. Surgical reduction may be necessary if the intussusception is refractory to the aforementioned techniques. This case reminds the emergency physician that intussusception should be considered in the work-up of lethargy in children.

References

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