CLINICAL IMAGES

Meckel's diverticulum-induced ileocolonic intussusception

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A previously healthy 8-year-old male complained of severe, intermittent and stabbing abdominal pain that had waxed and waned over the past 3 days. At the time of presentation, the pain was right-sided, peri-umbilical and non-radiating. He denied nausea, vomiting, hematochezia, melena or urinary tract symptoms; he had however experienced several recent episodes of brown diarrhea.

On physical exam, the child was afebrile with stable vital signs and was in mild distress secondary to pain. The abdomen was soft with hyperactive bowel sounds and non-specific right lower abdominal quadrant tenderness. Obturator, psoas, Murphy's and Rovsing's signs were all negative. On digital rectal exam, the rectal vault was empty and stool tested guaiac negative. A CT of the abdomen and pelvis was obtained and demonstrated the classic target sign of intussusception in both the longitudinal and transverse planes (Figs. 1 and 2). Exploratory laparotomy was performed, the intussusception was located and reduced, and a $1.5 \times 1.5 \times 1.5$ -cm Meckel's diverticulum was identified as the lead point and excised.

The target sign is classic for intussusception on both CT and ultrasound. Its appearance is attributed to the different densities of tissue layers that are apposed to each other by the telescoping bowel, and when the luminal diameter is increased, intussusception must be considered in the differential diagnosis [1]. Although most cases of intussusception are idiopathic, there have been several case reports of Meckel's diverticulum serving as a lead point [2–4].

Fig. 1 Target sign of intussusception on longitudinal CT





Fig. 2 Target sign of intussusception on CT cross section

References

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