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Ileocolic intussusception and hydrostatic reduction in a 2-year-old girl

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DESCRIPTION

A 2-year-old previously well girl presented at the hospital with intermittent acute painful crying (colicky pain) that recurred at frequent intervals for some hours. Between these episodes, she was painless but refused to eat or drink. During palpation, a mass was suspected in the right hemiabdomen. The rectal examination was unremarkable, and no bloody diarrhoea was present. Abdominal sonography with a linear transducer revealed an ileocolic intussusception (figure 1).¹ For hydrostatic reduction, warmed saline was instilled in the rectum. The intussuscepted ileum was smoothly pushed back under ultrasound guidance. Figure 2 shows the situation after hydrostatic reduction, with saline flowing from the cecum through the thickened ileocecal valve into the terminal ileum.

Intussusception describes the telescoping of a bowel segment into an adjacent segment. Ileocolic intussusception is the most common cause of intestinal obstruction in children between 3 months and 6 years of age, with an incidence of 0.3–4 per 1000 individuals.^{2–3} In this age group, most cases are idiopathic without a pathological lead point, apart from a possible association with hypertrophied lymphoid tissue in the terminal ileum.² Untreated intussusception is often fatal since most cases do not resolve spontaneously.³ With a timely diagnosis, many patients can be treated successfully without surgery. This may be performed by air enema or contrast fluid enema under x-ray fluoroscopic control.^{2–3} A radiation-free alternative is hydrostatic reduction under sonography-guidance.² If such pneumatic or hydrostatic reduction is impossible or contraindicated, then surgery is required.³

Figure 1 Sonography with a linear transducer showed a typical target sign with the central entering limb (arrowheads) and outer returning limb (arrows) of an ileocolic intussusception.

Figure 2 After successful hydrostatic reduction, saline was flowing from the cecum (long arrow) through the thickened ileocecal valve (arrowheads) into the terminal ileum (short arrows).

Learning points

- ▶ Ileocolic intussusception typically presents with intermittent colicky pain.
- ▶ Ileocolic intussusception can be well diagnosed by sonography.
- ▶ A radiation-free treatment is hydrostatic reduction under sonography-guidance.

Competing interests None.

Patient consent Obtained.

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