

should be considered after evaluation for serious conditions such as hydrocephalus and seizures. ■

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## References

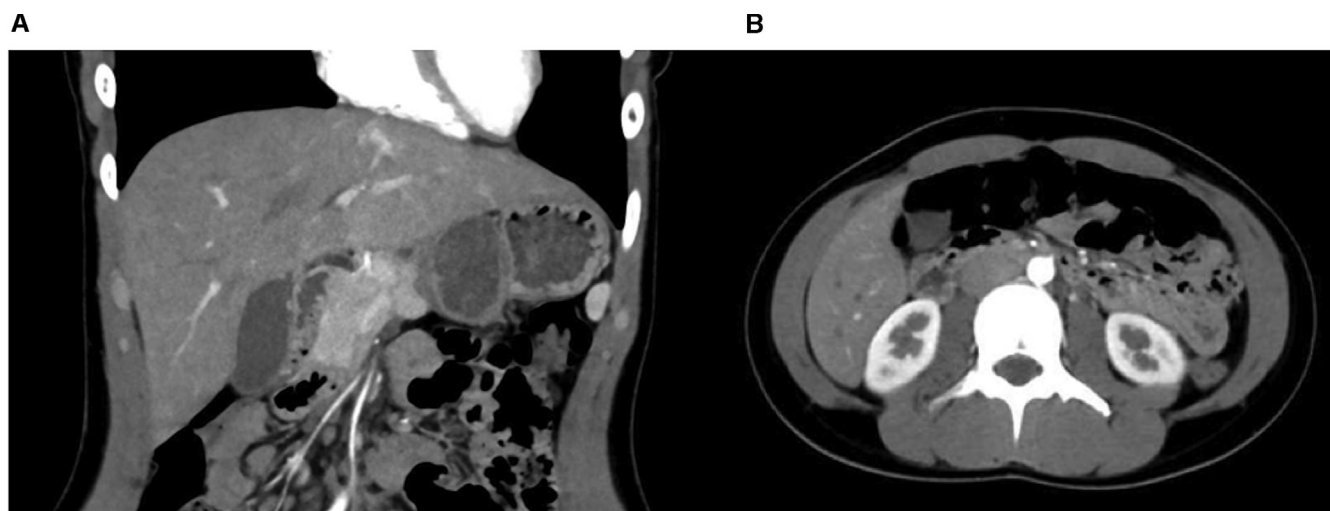
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## Transient Angioedema of the Small Bowel because of Intravenous Nonionic Iodinated Contrast Media



**A** 14-year-old girl was referred to our hospital for suspected accessory spleen torsion. There was no history of allergy or medication use. Abdominal multiphase contrast-enhanced computed tomography (CT) was performed. The patient had mild abdominal discomfort after intravenous administration of nonionic iodinated contrast media (CM) for CT. CT images in the arterial phase showed normal proximal small bowel (**Figure 1**); however, CT images in the venous phase revealed that the proximal small bowel had circumferential thickening of the wall including the duodenum (**Figure 2**). There was no accessory spleen torsion. We believed that the abdominal discomfort was caused by bowel angioedema during CM injection. The symptom resolved conservatively without any treatment.

There are several adult case reports on small-bowel anaphylactic angioedema induced by CM administration.<sup>1-3</sup> In an adult study, the incidence of CM-associated bowel angioedema ranged from 1.7% to 3.3%.<sup>4</sup> CM-associated bowel angioedema rapidly develops in the small intestine, particularly the proximal segment, owing to the richer supply of vessels<sup>1</sup> and, in this case, only the duodenum was affected in the venous phase. Although most patients with CM-associated bowel angioedema tend to complain of mild abdominal discomfort, this symptom usually does not require any specific treatment.<sup>3</sup> Moreover, no pericentric infiltration, mesenteric edema, free fluid, or vascular abnormality was observed with CM-associated bowel angioedema.<sup>4</sup>



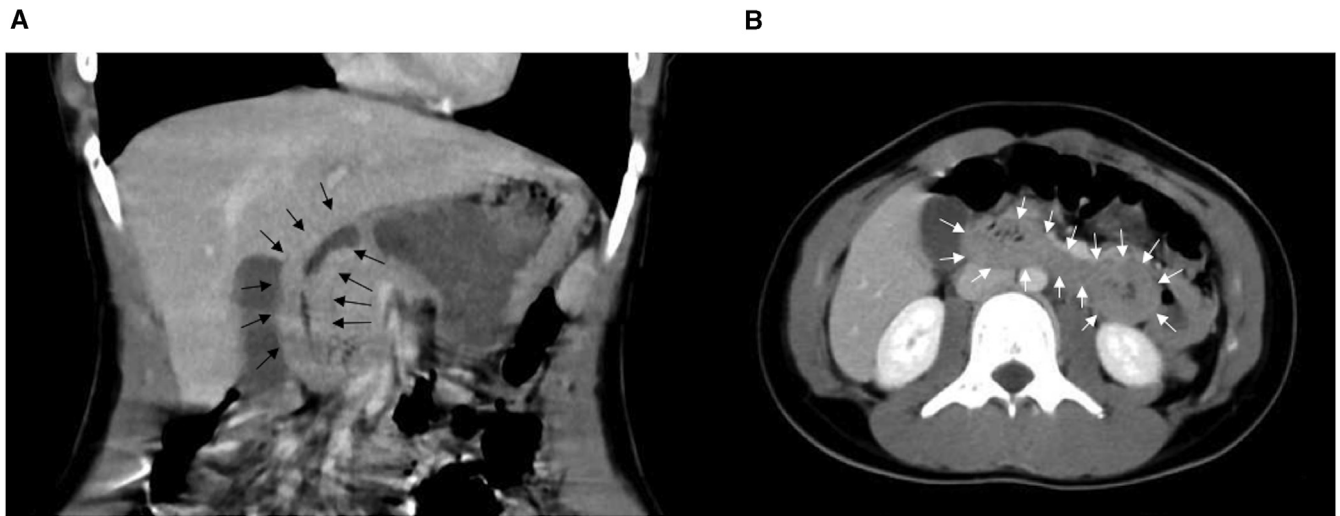
**Figure 1.** Arterial phase computed tomography. **A**, Nonthickening of the first to second segment of the duodenum. **B**, Nonthickening of the third to fourth segment of the duodenum.

The authors declare no conflicts of interest.

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**Figure 2.** Venous phase computed tomography. **A**, Circumferential thickening of the first to second segment of the duodenum (*black arrow*). **B**, Circumferential thickening of the third to fourth segment of the duodenum (*white arrow*).

In this case, although the proximal small bowel was normal in the arterial phase, after 45 seconds, there was thickening of the proximal small bowel wall in the venous phase. The patient had abdominal discomfort after CM injection, and the symptom resolved without any particular treatment. There were no associated inflammatory changes or vascular abnormalities. This is the first pediatric case of CM-associated bowel angioedema, indicating that CM-associated bowel angioedema can develop in children. ■

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