Diffuse small bowel lipomatosis with intussusception

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DESCRIPTION

A 40-year-old woman presented with acute-onset colicky abdominal pain. On physical examination, the patient was afebrile with a heart rate of 95 beats per minute. Abdomen was soft with tenderness in the periumbilical location. No rebound tenderness or guarding was noted. There was no palpable mass. A radiograph of the abdomen showed no obvious abnormality. A contrast-enhanced CT was done which showed diffuse fatty attenuation in the lumen of the small bowel (figure 1), suggestive of diffuse intestinal lipomatosis. In addition, there was telescoping of a segment of the ileum into its neighbouring loop, suggestive of ileoileal intussusception (figure 1). However, there was no upstream bowel dilatation to suggest obstruction and no evidence of ischaemia. MRI of the abdomen showed diffuse replacement of the small bowel lumen with macroscopic fat, confirmed by suppression of the fat signal on the fat-saturated images (figure 2). The patient improved on conservative management.

Bowel lipomas are submucosal lesions that are usually single or few. The term lipomatosis is used when there are innumerable lipomas or diffuse involvement of the bowel as in our case. Diffuse intestinal lipomatosis is a rare entity with an incidence of 0.04%–4.5% on autopsy.[1 2] The literature on intestinal lipomatosis with intussusception is even sparse and thus the most common site of intussusception is not known. The described sites of involvement include jejunojejunal, ileocolic and ileoileal segments.[1 2] The various causative mechanisms

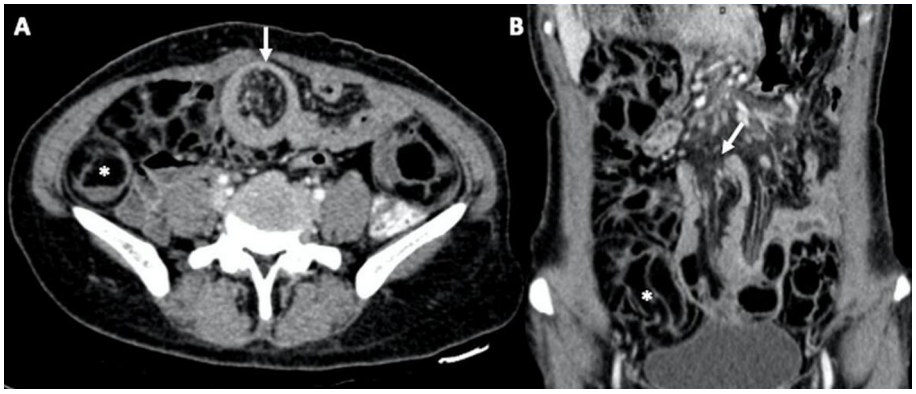

Figure 1 Contrast-enhanced CT images of the abdomen. (A) axial and (B) coronal images showing diffuse fatty replacement of the small bowel lumen (asterisk) with telescoping of a segment of the ileum into its neighbouring loop, suggestive of ileoileal intussusception (arrow).

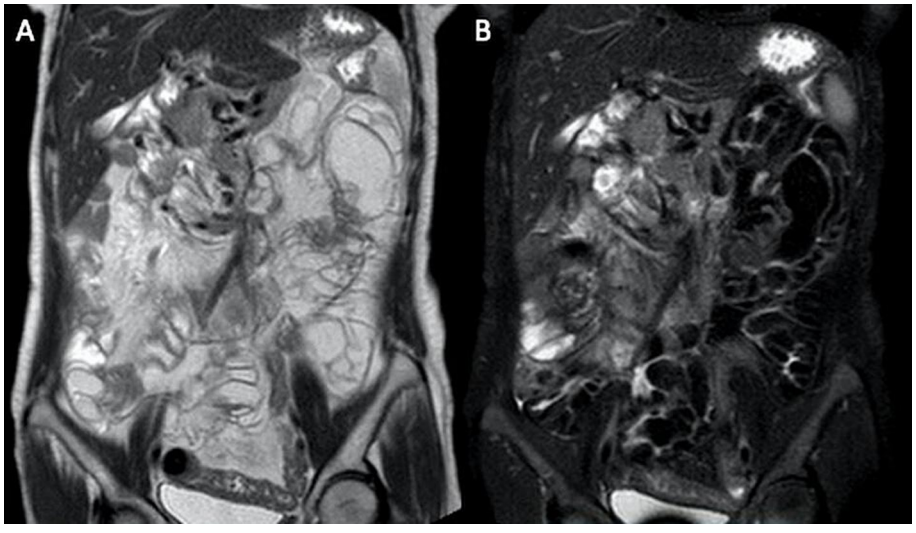

Figure 2 MRI images of the abdomen. (A) T2-weighted non-fat saturated coronal image of the abdomen showing diffuse hyperintense signal within the small bowel lumen. (B) on the T2-weighted fat saturated images, the T2 hyperintense signal gets suppressed, suggesting intraluminal macroscopic fat.

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include embryonic displacement of fat, disturbances of fat metabolism, chemotherapy, chronic inflammatory diseases and alcohol consumption.[3] Intestinal lipomatosis is usually asymptomatic and incidentally detected. However, it can lead to complications like intussusception, bleeding and perforation, which may be the first presentation of this condition.[4 5] The lack of upstream dilatation could be due to short segment of intussusception. Moreover fat that replaces the lumen in case of small bowel lipomatosis is soft and pliable and less likely to cause complete obstruction. Due to its rarity, there are no current guidelines on the choice of imaging modalities in diffuse small bowel lipomatosis. CT-scan is the preferred first-line imaging since it is fast, easily available, provides thin-section images in all three planes, less prone to motion artefacts and can easily detect the macroscopic fat and complications like intussusception. MRI can be used as a confirmatory tool rather than the first-line modality. There are no clear-cut management guidelines due to the rarity of this condition. Patients presenting with complications and not responding to conservative measures may need surgical management.

Learning points

- Diffuse intestinal lipomatosis is a rare entity, usually detected incidentally.
- It can lead to various complications like intussusception, bleeding and perforation.
- Complications may be the first presentation of this disease.

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