

Etiology, Clinical Manifestations, and Imaging Evaluation of Intestinal Obstruction in Adults at Tertiary Hospital in Mogadishu, Somalia: A Retrospective Study [Letter]

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Dear editor

I read with interest the article titled Etiology, Clinical Manifestations, and Imaging Evaluation of Intestinal Obstruction in Adults at Tertiary Hospital in Mogadishu, Somalia: A Retrospective Study, published by Ali AM et al.¹ They had rightly pointed out that CT is the modality of choice for evaluating small bowel obstruction (SBO) and had found that fibrous adhesions and incarcerated hernias as the leading causes in their cohort. The role of imaging in SBO is to confirm the obstruction, determine if it is a single transition point or a closed loop obstruction, establish the cause of obstruction, and identify signs of complications.² I would like to re-emphasize on certain imaging signs than can help differentiate the causes of SBO and identify complications. 'Fat notch sign' is one of the important signs of adhesive small bowel obstruction (SBO), along with beak sign, small bowel faces sign and lack of bowel wall thickening at the site of transition point. Insinuation of mesenteric fat at an area of focal caliber change or angulation of the bowel at the site of transition point in a patient with small bowel obstruction on CT, due to extrinsic compression by an extraluminal band is known as the 'fat notch sign'.³ Adhesive SBO may be either due to is usually due to a single adhesive band or matted adhesions. Single adhesive bands usually measure more than 1 cm in length and less than 1 cm in width, whereas matted adhesions are usually less than 1 cm in length and more than 1 cm in width.⁴ The positive predictive value for a single band was 92% for the beak sign and 100% for the fat notch sign, in cases of adhesive SBO due to single band and can be used to exclude matted adhesions as a cause of SBO.^{3,4} Complications of SBO include strangulation, ischemia, perforation and peritonitis. Identifying ischemic or strangulated bowel is essential because its presence greatly increases the risk of mortality up to 40% in cases of SBO.^{4,5} CT has a sensitivity of 83% and specificity of 92% for the diagnosis of bowel ischemia with signs of ischemia being decreased bowel wall enhancement, mesenteric edema, bowel wall thickening >3 mm (target sign), intraluminal hemorrhage, engorged mesenteric vessels, the whirl sign, pneumatosis, and mesenteric or portal venous gas. Decreased bowel wall enhancement is the most specific sign of bowel ischemia, with a specificity of 94% to 100%.⁵ As non-operative management is the treatment of choice in the absence of signs of strangulation, ischemia, and peritonitis and is effective in 70% to 90% of patients, radiologists have a pivotal role in diagnosis of SBO as well as guidance of its management (non-operative management/immediate surgical exploration).

Disclosure

The author reports no conflicts of interest in this communication.

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