

Feces Sign in Small Bowel Obstruction

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Received: November 06, 2020; **Accepted:** November 23, 2020; **Published:** November 30, 2020

Keywords: *Feces sign; CT; Bowel obstruction*

Image Description

The feces sign is a radiological computed tomography sign first described by Mayo-smith and al. [1] in 1995 in patients with small bowel obstruction, in which the dilated segment of the small bowel contains a mix of gas and particulate matters, mainly caused by a gradual fluid absorption through the bowel wall making undigested particle matter trapped above the narrow point.

It is present in 7.4% to 55.9% of patients admitted for small bowel obstruction and helps localize the transition zone.

Patients present four main clinical symptoms: abdominal pain, vomiting, meteorism and inability to have a bowel movement or pass gaz.

Plain radiograph of the abdomen is the first line imaging method, it shows the presence of a dilated bowel containing typical air fluid levels.

Computed Tomography (CT) scan is the main imaging method. It confirms the diagnosis of small bowel obstruction, it differentiates between mechanical or functional obstruction, it shows its etiology, and determines its severity. CT protocol includes multiplanar reformatted images with thin collimation before and after injecting contrast material enhanced in both arterial and portal phase [2-4].

The feces sign is typically found by the transitional zone, thus helps localize the obstacle.

It will be shown in a CT scan as a feces like material mixed with at least five bubbles in a dilated small bowel segment measuring over 25 mm in diameter, and most often found by the transition zone.

The images below (FIG. 1) describe the case of a 30 years old male, treated for colon cancer in 2018, admitted in the ER for abdominal pain associated with an inability to have a bowel movement or pass gaz, to which an abdominal enhanced CT scan at portal phase confirmed a small bowel obstruction syndrome with a feces sign right above the transitional zone where a peritoneal mass was the cause of the obstruction.

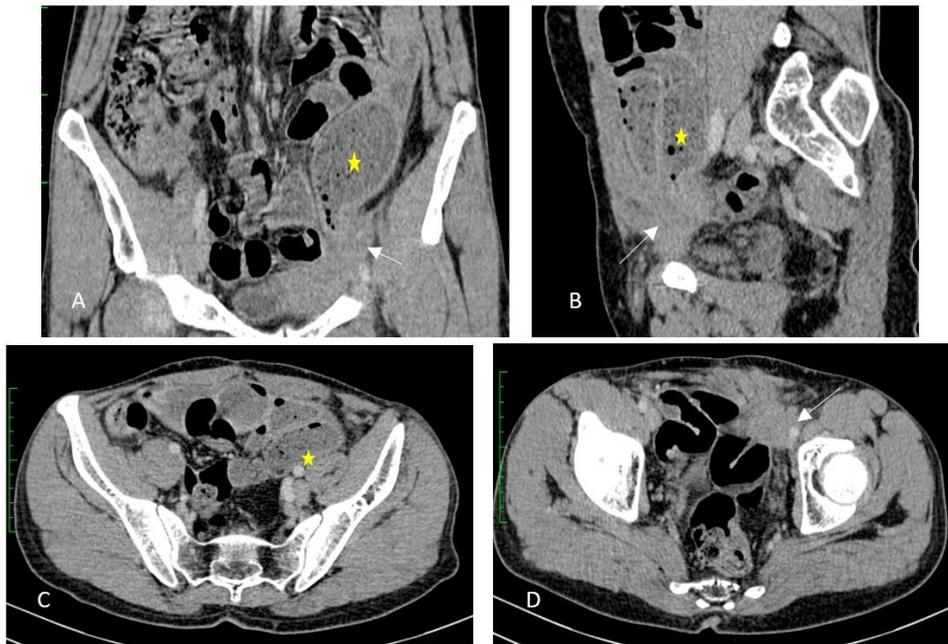


FIG. 1. Abdominal enhanced CT scan at portal phase with coronal (A) and sagittal (B) reconstructions showing a mechanical small bowel obstruction with a transition zone feces sign (yellow star in images A, B and C) above a peritoneal mass (white arrow in images A, B and D).

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