

**CLINICAL QUIZ**

## Right Iliac Fossa Pain in Elderly: Always Appendicitis?

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Figure 1a: Contrast enhanced computed tomography showing diffuse thickening of rectosigmoid colon

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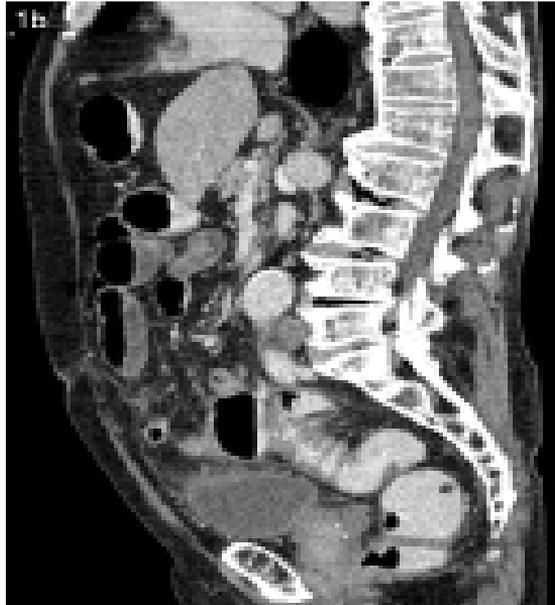


Figure 1b: Computed tomography in sagittal view showing diffuse thickening of rectosigmoid colon with fat streakiness

### QUESTION

A 76-year-old male, previously well, presented with acute, non-migratory right iliac fossa pain for a week. He denied per rectal bleeding, production of mucus, or constitutional symptoms but complained of constipation since 6 months ago. Upon assessment, he was septic with localized guarding at the right iliac fossa. A contrast enhanced computed tomography was obtained (Figure 1a and 1b). Spot the radiological diagnosis and briefly discuss the sequelae of this condition?

### ANSWER

A contrast enhanced computed tomography (CT) of abdomen in axial plane showed small outpouchings at the rectosigmoid colon associated with diffuse thickening and peri-colonic fat stranding (arrow head) (Figure 2a). An abnormal contrast pooling with air fluid level was noted adjacent to the thickened loop of bowel in keeping with viscus perforation (arrow) (Figure 2b). These are the features to suggest of sigmoid diverticular perforation. Despite of the involvement of the sigmoid colon, patient presented with right iliac fossa pain which mimicked right sided colonic pathology. In view of this incongruent peculiarity, an imaging modality was mandatory.

CT is the modality of choice for diagnosing diverticulosis with overall sensitivity and specificity of 99%, respectively. The most specific imaging features that point

towards the diagnosis of diverticulitis are fascial thickening, free fluid and inflamed diverticula. In our case, two out of three features were present, apart from the contrast leak. CT has been shown to be superior to contrast enema studies and laparoscopy in diagnosis diverticulitis, especially in the clinical context of seriously ill patients.

Colonic diverticulosis is an important cause of hospital admissions and a significant contributor to healthcare costs in industrialized nations. It is the most common colonic disease worldwide especially in western countries. It is evidenced by 5 to 10 mm saccular protrusions of the mucosa and submucosa through the muscular layer, in the sites of weakness of the colon wall caused by the merging of the vasa recta. Abnormal gut motility, raised intraluminal pressure, and disordered colonic microenvironment are associated with the pathophysiology of colonic diverticulosis. Most patients with diverticulitis are treated conservatively. In complicated disease, patients can present with perforation, fistula, and stricture, hence giving the name according to its complication. Decision for surgery is only indicated when the diverticular disease is refractory to medical therapy and falls under a complicated disease.



Figure 2a: Small outpouchings at the rectosigmoid colon associated with diffuse thickening and pericolic fat stranding (arrow head)

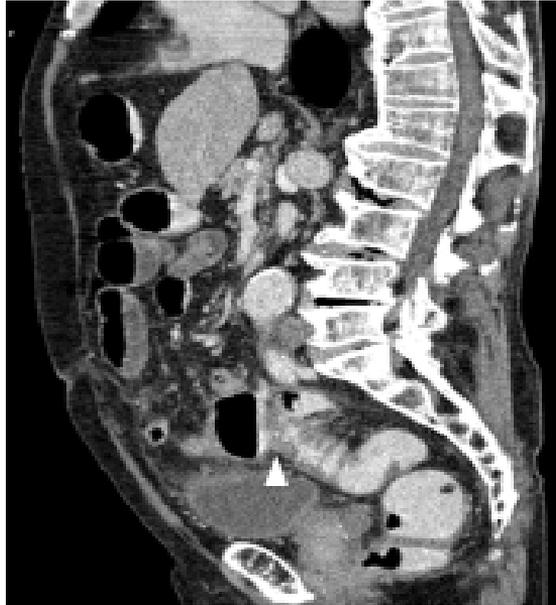


Figure 2b: An abnormal contrast pooling with air fluid level was noted adjacent to the thickened loop of bowel in keeping with viscus perforation