

Helical CT diagnosis of perforated isolated diverticulum

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Section: Abdominal imaging

Imaging Technique: CT

Case Type: Clinical Cases

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Patient: 57 years, male

Imaging Findings:

57 year old man presenting with sudden onset of pain in the right lower quadrant of the abdomen three days before admission. The patient showed pain and tenderness in the lower right abdomen with mild elevation of leucocytes, c-reactive protein, without fever. Clinically an inflammatory process of the abdomen was suspected. For further evaluation of the abdomen helical CT with administration of iv and oral contrast agents was performed.

Discussion:

Pain and tenderness in the right lower quadrant of the abdomen is highly suspicious for acute appendicitis, which is the most common cause of laparatomies. Other reasons for acute abdominal pain in the right lower abdomen are colitis, enteritis, cholecystitis, pyelonephritis and in women gynecologic diseases. Diverticulitis commonly occurs in the sigma and in the descending colon and therefore lead to left lower quadrant pain. Nevertheless cases of right colonic diverticulitis have been reported in the literature. Plain radiography of the abdomen to rule out perforation usually is the first step in radiological evaluation. Sonography is helpful in children to diagnose inflammation of the intestine (i.e. appendicitis, colitis, enteritis), but is of questionable value in the adult population. CT has been recommended, especially in adult patients for further evaluation of inflammatory disease of the abdomen. Helical CT in this patient showed inflammatory changes in the cecal region with signs of perforation and was interpreted as perforated acute appendicitis. No further studies like barium enema or endoscopy to rule out malignancy were performed, because the surgeon decided to operate upon emergency. Surgery revealed perforated isolated diverticulum of the cecum.

Differential Diagnosis List: Perforated isolated diverticulum of the cecum

Final Diagnosis: Perforated isolated diverticulum of the cecum

References:

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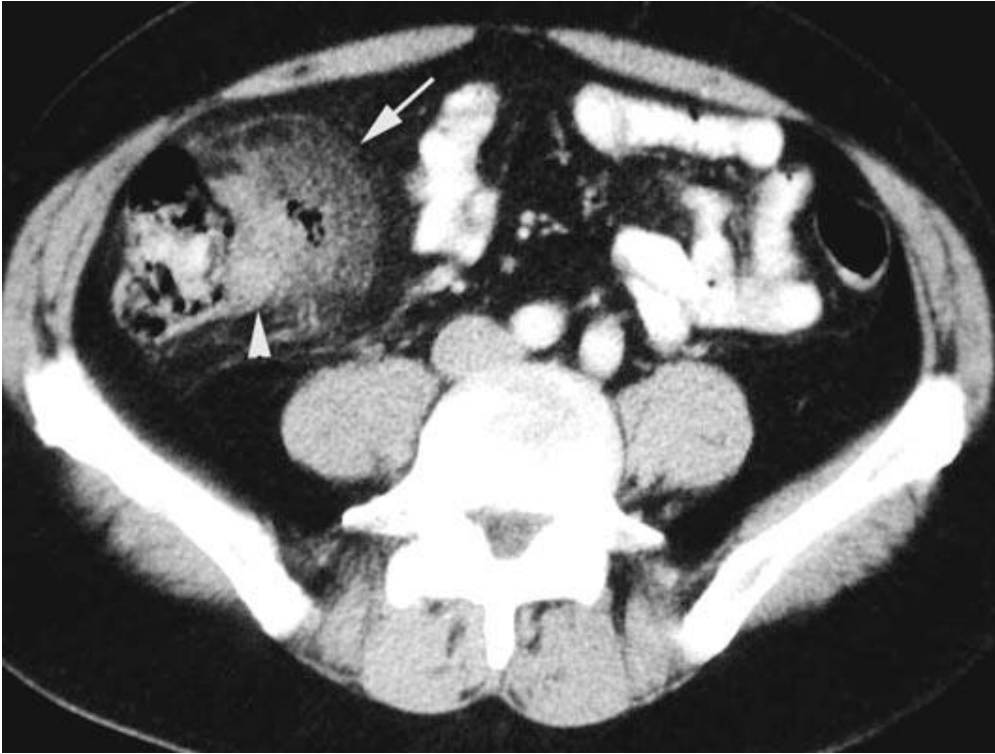
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Figure 1

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Description: Thickening of the medial wall of the cecum, indicative for the perforated diverticulum (arrowhead). Pericecal hyperdense changes with central air bubbles due to perforation and inflammatory infiltration of fatty tissue (arrow). **Origin:**