

## Pseudolipoma of the IVC

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**Section:** Cardiovascular

**Area of Interest:** Abdomen

**Procedure:** Contrast agent-intravenous

**Imaging Technique:** CT

**Special Focus:** Tissue characterisation Case Type:

Clinical Cases

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**Patient:** 75 years, male

### Clinical History:

A 75-year-old man presented to the ER with left-sided lower abdominal pain. He reported no other complaints. He gave a history of diverticulitis and chronic obstructive pulmonary disease. Abdominal examinations revealed generalised rigidity and tenderness in left fossa. Rectal exploration: normal faeces. Laboratory results showed increased CRP and leukocytosis.

### Imaging Findings:

Contrast-enhanced computed tomography (CT) of abdomen was performed, which revealed signs of acute diverticulitis. CT revealed also hepatic steatosis and on axial images (Fig. 1) showed a rounded, well-defined, fat-containing lesion (-96 H), medial to the inferior vena cava (IVC), which initially appeared to lie intraluminally in the intrahepatic IVC because of a thin medial line resembling medial wall of the IVC. However, coronal reformation (Fig. 2) revealed its true location to be juxtacaval, medial to the IVC, contiguous to the subdiaphragmatic fat tissue, and the thin medial line contiguous to the diaphragm.

### Discussion:

Pseudolipoma of the IVC refers to localised collection of adipose tissue adjacent to the intrahepatic portion of the IVC. It is regarded as an uncommon incidental normal variant with a prevalence of 0.5-0.55% in adults undergoing abdominal CT. It occurs more commonly in patients with liver disease and might be related to obesity or anatomical variation. [1, 2]

It usually appears as an oval or round collection in transverse sections, with attenuation values in the range as those for fat tissue.

It is typically located at or superior to the confluence of the hepatic veins and the IVC, usually observed medial or posterior to the IVC, and contiguous to the subdiaphragmatic fat tissue. [1, 3]

It is suggested that atrophy of the right hepatic lobe creates a pericaval space between the diaphragm and the IVC, and this space becomes filled by juxtacaval fat. [1, 3]

On axial images it may simulate serious intraluminal lesions of the IVC such as thrombus, tumours or intraluminal lipoma.

Reformatted images and ultrasound are used in identifying its juxtacaval location. Therefore awareness of the

radiologists of this entity is important to avoid misdiagnosis and subsequent unnecessary intervention. [1, 2, 3, 4]

In this case, the juxtacaval fat appeared to be intraluminal on axial images, however, coronal reformatted images revealed its true position to be juxtacaval and a review of previous CT abdomen images of the patient revealed no changes in its appearance and size.

**Differential Diagnosis List:** Pseudolipoma of the IVC, Lipoma of the IVC, Tumour of the IVC

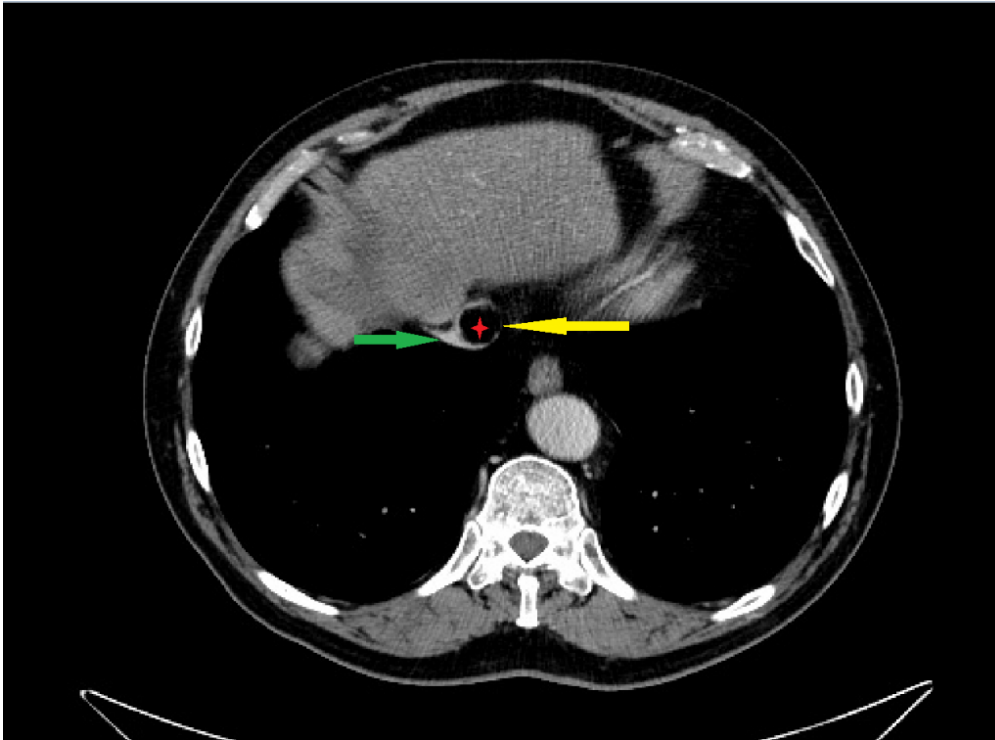
**Final Diagnosis:** Pseudolipoma of the IVC

**References:**

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**Figure 1**

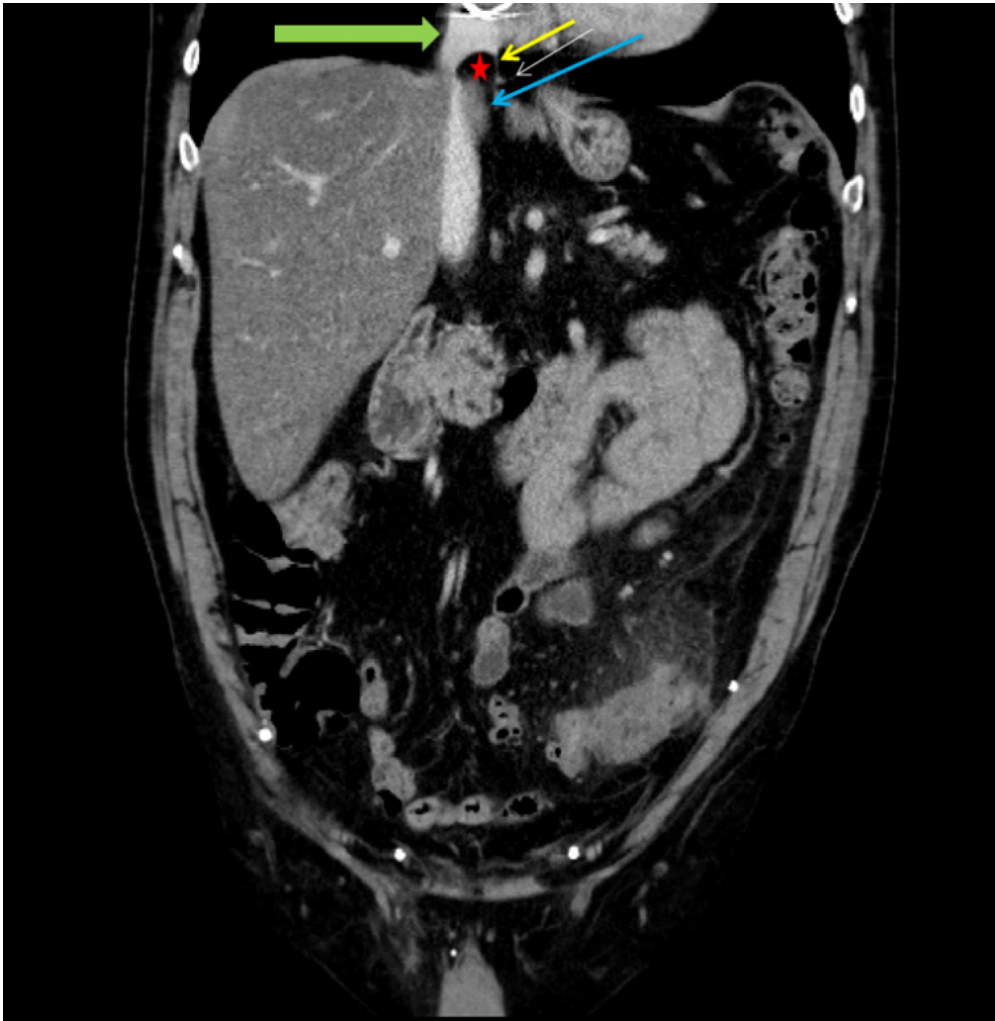
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**Description:** Axial image shows a fat collection (red star) medial to the IVC (green arrow). A thin medial line (yellow arrow) resembling medial wall of the IVC. **Origin:** Department of radiology, Zealand University Hospital-Køge, Denmark

**Figure 2**

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**Description:** The fat collection (red star) is contiguous to subdiaphragmatic fat tissue (blue arrow). The thin medial line (yellow arrow) resembling the medial wall of IVC (green arrow) is contiguous to diaphragm (white arrow). **Origin:** Department of radiology, Zealand University Hospital-Køge, Denmark