

Case Report

INTRAPERITONEAL FOCAL FAT INFARCTION OF LESSER OMENTUM- A RARE CAUSE OF ACUTE ABDOMEN: A CASE REPORT

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ABSTRACT

Omental infarction is a rare cause of acute abdomen, mostly occurring in the right lower abdomen and mimicking acute appendicitis. Omental infarct in epigastric region involving lesser omentum mimics acute pancreatitis or gastritis and is much rarer. We report a case of lesser omental infarct presenting with severe epigastric pain showing echogenic mass anterior to head of pancreas on ultrasound and heterogenous fat on computed tomography. A diagnosis of omental infarct was made and the patient was managed conservatively. Hence, diagnosis of omental infarct based upon the specific radiological features is helpful as it can be managed conservatively and avoids unnecessary surgical treatment.

Keywords: Acute Abdomen, Epigastric Pain, Omentum, Infarction, Fat Necrosis

INTRODUCTION

Omentum is double layer of peritoneum connecting stomach to adjacent organs. Part of the omentum that hangs down from the greater curvature of the stomach and the proximal part of the duodenum is the greater omentum. And the omentum that connects the lesser curvature of the stomach and proximal duodenum with the liver is the lesser omentum (Yoo *et al.*, 2007). Intra abdominal fat is metabolically active and can undergo necrosis due to various underlying pathological processes (Epiploicae appendagitis, omental infarction, omental torsion, fat necrosis due to trauma and pancreatitis) (Kamaya *et al.*, 2011; Mavroeidis *et al.*, 2013).

CASE

49 years old woman presented with severe pain abdomen in the epigastric and left hypochondriac region since 4 days associated with nausea. No history of altered bowel habits was present. Patient was non-smoker and non-alcoholic. On examination, she was afebrile and had epigastric tenderness. Clinically the possibilities of gastroduodenal ulcer disease, pancreatitis and cholecystitis were kept. Laboratory findings showed normal total leucocyte count, liver function tests, serum amylase and lipase levels.

Abdominal ultrasound showed non-compressible echogenic area anterior to the head of pancreas which appeared to be inflamed fat and was tender to probe pressure (Figure 1). However, the pancreas appeared normal in size and echo texture. No evidence of any peripancreatic fluid was seen.

US image was not that informative as to the extent and our diagnosis required further evaluation. Contrast enhanced CT was done that showed a heterogenous inflamed fat anterior to pancreas between the left hepatic lobe and the stomach (Figure 2). Based on these findings diagnosis of focal fat infarction of lesser omentum was made and the patient was managed conservatively.

DISCUSSION

With increasing use of high quality imaging, especially computerized tomography, for the evaluation of acute abdomen, preoperative diagnosis of focal fat infarction is made much more often. Although, initial ultrasounds are usually labeled as normal, the classic appearance is that of solid, non-compressible, moderately hyperechoic mass that is tender to probe pressure and organs in the vicinity are normal that excludes the diagnosis of secondary inflammatory fat due to other conditions (Ahmed *et al.*, 2013). The diagnosis of omental infarction is based primarily on CT findings of a well-defined fatty mass with stranding and streakiness (Singh *et al.*, 2006).

Intra peritoneal focal fat infarction mimics more common intra-abdominal pathologies and is frequently misdiagnosed as ultrasound and other lab parameters are within normal range. A diagnosis

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of omental infarct based upon the specific radiological features is helpful as it can be managed conservatively with oral anti-inflammatory therapy and correct diagnosis negates further investigation and avoids unnecessary surgical treatment.

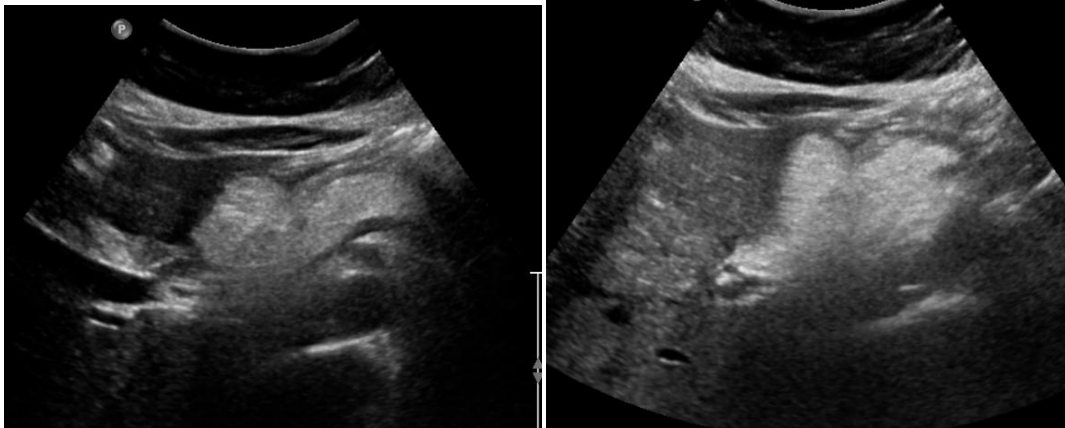


Figure 1: (A) Sonographic Image Shows a Well-Defined Echogenic Lesion Anterior to the Head of Pancreas; (B) Echogenic Lesion is Seen in Close Relation to the Left Lobe of Liver

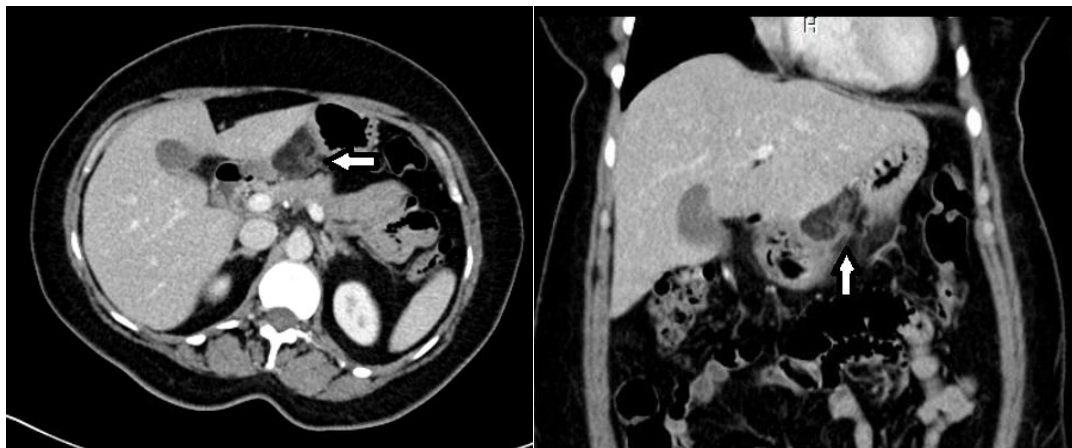


Figure 2: Contrast Enhanced CT Images (Portal Venous Phase); (A) Axial Section Shows a Well Circumscribed Inflammatory Mass of Fat Attenuation in Gastrohepatic Region (Arrow); (B) Coronal Section Showing Hyper Attenuating Streaks within the Mass (Arrow) & Lesion Lying between the Left Hepatic Lobe and the Lesser Curvature of the Stomach

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