hospital stay and may take months to recover from hypoxemia.<sup>4</sup> The strongest predictors of death include a preoperative partial pressure of oxygen of 50 mmHg or less and a lung scan with brain uptake of 20% or more.<sup>5</sup> Our patient had a favorable outcome despite suffering from severe HPS and a significant brain uptake of 73%. Such association of CHF with extra-hepatic porto-systemic shunt and HPS precludes shunt ligation alone as a therapeutic option. Liver transplantation itself is technically demanding given the small caliber of the portal vein making portal vein anastomosis difficult. In our patient the anastomosis was successful and a good inflow was obtained after shunt ligation. The patient had an uneventful surgery but required domiciliary oxygen therapy for one month before complete recovery.

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# Appendagitis: a benign differential diagnosis in acute abdomen

### Introduction

Epiploic appendages are visceral peritoneal out-pouchings of colon containing fat and blood vessels. Appendagitis is a benign and self-limiting condition of epiploic appendages.¹ Primary epiploic appendagitis (PEA) results from spontaneous thrombosis of the veins draining the appendages in absence of any torsion or ischemia.² Secondary epiploic appendagitis, on the other hand, develops due to inflammation of adjacent structures like appendicitis, diverticulitis or cholecystitis. PEA often presents with acute abdominal pain and can mimic acute diverticulitis or appendicitis on clinical examination. Its diagnosis is challenging due to the lack of any pathognomonic clinical features. Computed tomography (CT) scan has an important role in the diagnosis of PEA.³ Timely diagnosis can avoid unnecessary surgical treatment.

## Case report

A 35-year-old woman presented with sudden onset, severe pain abdomen since five days; localized to the upper left quadrant of the abdomen. The pain was accompanied by fever for initial two days. There was no history of constipation or vomiting. Physical examination revealed marked tenderness over the left upper quadrant of the abdomen with peritoneal sign of guarding and rebound tenderness. Rest of the physical examination was normal. All laboratory tests were within normal limits including white cell count, serum amylase, and liver and renal function tests. Pregnancy test was also negative. Ultrasound examination of the abdomen revealed a hyperechoic non-compressible pericolonic mass, and no organomegaly was seen. The persistent pain with localized peritoneal sign, prompted us to perform a contrast-enhanced CT scan of the abdomen and pelvis. The CT scan revealed focal fat stranding with mesenteric fat inflammation adjacent to the colon in the left para-sagittal, paraumbilical, omental region, which were consistent with the diagnosis of epiploic appendagitis (Figures 1A & 1B). Colonoscopic examination was normal. The patient was treated conservatively and she improved within a few days. Case report 119





Figure 1 A) and B): Focal fat stranding with inflammatory changes in the left para-sagittal and paraumbilical, omental region.

## Discussion

Primary epiploic appendagitis is not as rare as is often thought. Its frequency is estimated at 1.3% in patients presenting with acute pain abdomen.<sup>4</sup> The main presenting symptom is severe, sudden onset, focal abdominal pain with localized tenderness

and guarding. However, the symptoms tend to regress within a week. Omental infarct is another entity that has similar clinical and radiological characteristics, but on CT scan, omental infarct often presents as a much larger lesion with no visceral peritoneal thickening. <sup>5,6</sup> Pathognomonic CT scan finding of PEA is a 2–4 cm, oval shaped, fat density lesion, surrounded by inflammatory changes. In contrast to diverticulitis, the colon reveals a uniform diameter with a regular wall and no signs of thickening. <sup>5,6</sup> Given its self-limiting course with spontaneously resolution, patients with PEA are conservatively managed. <sup>7</sup> In conclusion, in a patient presenting with sharp, localized, acute abdominal pain unassociated with nausea, vomiting, fever or laboratory values typical of acute abdomen, a differential diagnosis of PEA should be entertained, and a CT scan abdomen should be performed to clinch the diagnosis.

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