

## Case Report

# Acute idiopathic omental infarction as an unusual cause of left iliac fossa pain: a case report

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## ABSTRACT

Acute idiopathic omental infarction is an uncommon cause of abdominal pain. Only about 300 cases have been reported in the medical literature so far. 15% of cases occur in the pediatric age group. Omental infarctions are common on the right side and present as right iliac fossa pain. Clinical presentation usually mimics acute appendicitis and leads to unnecessary surgical intervention in majority of the cases. Acute idiopathic omental infarction presenting as left iliac fossa pain has not been reported till now in medical literature. Controversy exist regarding the management of acute omental infarction. While a few authors recommend surgical resection of the infarcted omentum, most authors recommend conservative management. Here we report a case 36 years old lady with acute idiopathic omental infarction presenting as the left sided abdominal pain. Diagnosis was made on contrast enhanced CT imaging. She was managed conservatively with NSAIDs and antibiotics. She was discharged after 2 days of in hospital. She improved clinically on outpatient follow up at 1 week, 1 month and 6 months. In short, acute idiopathic omental infarction is an unusual cause of left iliac fossa pain. Patients may benefit from conservative management, once the diagnosis is confirmed based on imaging. Further studies are necessary to devise a correct guideline on surgical intervention and conservative management in omental infarction.

**Keywords:** Acute appendicitis, Left iliac fossa pain, Omental infarction, Right iliac fossa pain

## INTRODUCTION

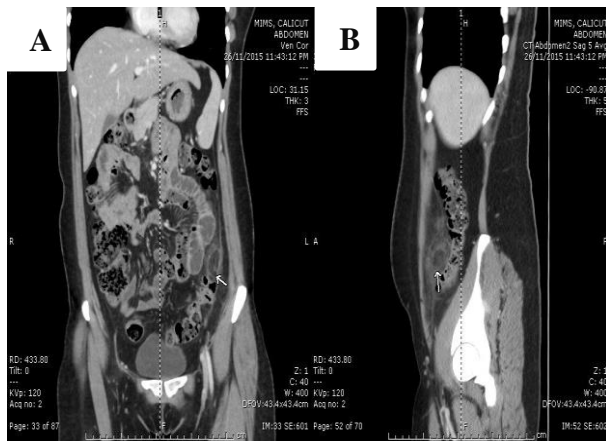
Omental infarction is an unusual cause of abdominal pain.<sup>1</sup> It is more common in obese pre-adolescent boys.<sup>1</sup> It occurs due to the compromise in the blood supply to omentum due to torsion or due to venous thrombosis.<sup>1</sup> Typically it presents as right iliac fossa pain and is often misdiagnosed as acute appendicitis. Due to this most of the cases reported till now, are diagnosed intraoperatively. The condition is self-limiting and benign and hence surgical intervention can be avoided if proper diagnosis is done preoperatively. Acute idiopathic omental infarction presenting as left iliac fossa pain is extremely rare in the medical literature, with 3 cases reported previously in the literature as of our knowledge.<sup>2</sup> Here we report a case of

omental infarction causing left sided pain in a middle-aged lady with no comorbidities

## CASE REPORT

A 36 years old lady presented to our emergency department with history of sudden onset of severe left iliac fossa pain of 3 days duration. There was no history of fever, vomiting, altered bowel and bladder habits. Her menstrual cycles were normal and there was no previous history of dysmenorrhoea. Her obstetric score was P2L2 and last child birth was 10 years back. On examination, she was conscious oriented and hemodynamically stable. She had severe tenderness in the left iliac fossa, no rebound tenderness and normal bowel sounds. Digital

rectal examination and vaginal examination were normal. Hemogram, liver function tests, serum lipase, serum amylase, serum lipase and urine examination were normal. Urine pregnancy test was negative. Ultrasound abdomen was normal except for Grade 1 fatty liver. A Contrast enhanced CT of the abdomen and pelvis showed a focal area of fat stranding in the left iliac fossa with surrounding hyper dense area, suggestive of acute omental infarction. She was managed conservatively with NSAIDs and antibiotics. Her pain decreased by day 2. She was discharged after 2 days of in hospital stay on oral analgesics. She was symptomatically better on 1 week follow up. She was clinically normal in outpatient follow up done at 1 month and 6 months



**Figure 1: (A) Coronal contrast; (B) Sagittal contrast enhanced sections in the venous phase showing a focal area of fat stranding in the left iliac fossa adjacent to the descending colon with a hyperdense peripheral halo suggestive of omental infarction.**

## DISCUSSION

Omental infarction presenting as left sided abdominal pain is extremely rare.<sup>2</sup> Most of the cases reported in literature presented with right sided abdominal pain.<sup>3</sup> Omental infarction, due to its lower incidence is often misdiagnosed as acute appendicitis, epiploic appendagitis, diverticulitis, acute cholecystitis, acute pancreatitis and other intra-abdominal pathology.<sup>4</sup> It is commoner in pediatric population, with higher incidence rates in obese preadolescent boys. Omental infarction can be primary (idiopathic) or secondary depending on the cause of omental infarction. Primary omental infarction occurs with no explainable cause, while omental infarction occurs due to compromised blood supply due to omental torsion, hypercoagulability, vasculitis, trauma or omental tumors/cysts. Clinical presentation is usually acute onset of abdominal pain, usually in the right lower abdomen. Pain may or may not be associated with fever and vomiting. Altered bowel habits are not usually present.

Omental infarction may be visualised on ultrasound abdomen as focal area of increased echogenicity in the

omental fat. Definitive diagnosis is made using CT scan of abdomen which shows focal area of fat stranding with a hyperdense peripheral halo. In case of omental infarction secondary to omental torsion swirling of omental vessels can be visualized.<sup>5</sup> Omental infarction and omental torsion are usually self-limiting. However, a few case reports suggest the possibility of infection of the infarcted segment, leading to abscess formation.

Controversy exists regarding the management of omental infarction. While most of the authors recommend conservative management, a few authors strongly recommend for surgical intervention in view of possible complications.<sup>6-8</sup>

Park et al, argues that, since the omental infarction and omental torsion are self-limiting conditions based on previous case reports and case series, surgery should not be the first line of management, once the diagnosis is confirmed based on CT imaging.<sup>8</sup> However Park et al recommends surgical intervention in case of deteriorating clinical signs. This conclusion was made based on the review of 14 case reports. Similarly, Itenburg et al, advocates close monitoring of a patient in the first 24-48 hours and advocates surgery in case of deterioration in any symptom, sign or clinical marker.<sup>7</sup> Fragoso et al, recommends conservative management based on similar observations.<sup>9</sup>

Some authors strongly recommend surgical exploration and partial omentectomy, laparoscopic approach is preferred by most authors. It is argued that surgical exploration and partial omentectomy, relieves the pain quickly, reduces the duration of hospital stay and decreases the risk of possible secondary infection and abscess formation.<sup>10</sup>

Being a relatively rare condition, current guidelines are mainly based on case reports and case series. This is a major limitation in devising a uniform guideline for management. However, it is generally agreed that most of the patients treated conservatively have similar outcomes compared to surgically managed patients. Even though, theoretically, there is an increased risk of developing secondary infection and abscess formation in conservatively managed patients, practically there is no difference in long term outcome.

## CONCLUSION

Acute idiopathic omental infarction is an unusual cause of left iliac fossa pain. Patients may benefit from conservative management, once the diagnosis is confirmed based on imaging. Further studies are necessary to devise correct guidelines on the management of omental infarction.

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