

KEYWORDS: Omental Infarction, Acute Appendicitis, Necrosectomy

## INTRODUCTION

Omental infarction is a very rare cause of a right sided pain abdomen with an incidence of < 4 in 1000 cases of appendicitis (1). It can mimic both acute appendicitis and acute cholecystitis. (2) Majority of the cases have been reported in paediatric age group. (3) Left sided omental infarct is very rare in both adults and paediatric age group. (4, 5). With the improvements in imaging modalities and era of diagnostic laparoscopy there has been a rise in reporting of cases of omental infarct. The literature supports both conservative and surgical management. We present two cases of the condition, both are of adult age group, with one presented as left sided infarct and was managed conservatively and the other with right sided upper abdominal pain and was taken up for surgery.

# **CASE REPORT**

35 years old male a known case of Duodenal ulcer operated in 2007 presented with sudden onset pain in left lower quadrant of 7 days duration. There was no history of any bowel or bladder symptoms. No history of trauma, fever, anorexia or vomiting. On examination his vitals were within normal limits. All hematiological and biochemical parameters were normal. Ultrasound was suggestive of left sided omental infarct which was confirmed on Contrast enhanced Computerised Tomography (CECT) revealing a hypodense, homogenous mass with fat stranding in left lower quadrant (Figure 1). Based on the radiological findings patient was diagnosed to have left sided omental infarct. The patient was managed with broad spectrum antibiotics, adequate analgesia and hydration and was discharged after 07 days on complete relief of symptoms and is kept under regular follow up.



Figure 1 : Left sided Omental Infarct
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40 year old male with no known comorbidities presented to emergency department with history of severe right sided abdominal pain of 02 days duration. There was history of anorexia, fever and 2 to 3 episodes of vomiting. On examination patient was febrile with tachycardia. Per abdomen examination revealed tenderness in right lumbar and hypochondrial region. Rebound tenderness was present. On investigations there was leuckocytosis and all other blood tests were normal. Ultrasound abdomen and CECT abdomen showed right sided omental infarct with a normal gall bladder and appendix (Figure 2). In view of severe pain and examination findings patient was taken up for exploration which revealed omental infact in right upper quadrant (Figure 3) with a normal appendix (Figure 4) Patient underwent omental necrosectomy. The patient had an uneventful post operative period and was discharged after 10 days of surgery and is under regular follow up



Figure 2 : Right sided Omental Infarct



Figure 3 : Necrosed Omentum

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### Figure 4: Normal Appendix

The similarity between the two cases were that both were residing in High Altitude Area for over a year. Both patients were screened for procoagulant state and thrombophilia work up was unremarkable.

#### DISCUSSION

Omental infarction is a benign condition which mimics life threatening surgical pathologies most commonly reported in paediatric age group with male sex and obesity being a major risk factor (6). The condition is more common on the right side due to longer length, altered vasculature and increased mobility of the greater omentum. It is prone to thrombosis secondary to stretching of omental veins and is less tolerant of spontaneous venous stasis. (7) The common differentials in right sided pain abdomen are acute appendicitis, epiploic appendagitis, intussusception, malrotation and acute cholecysitis.(1,8) With the use of imaging modalities and advent of laparoscopy and awareness of the entity amongst health care personnels, the prevalence of this condition is 32.6 % as many cases are being diagnosed and reported.(2,8). Local trauma, heavy food intake, coughing, sudden body movements, laxative use and hyperperistalsis are other reported risk factors. (6) The sensitivity of ultrasound to detect the condition is reported to be 64% as compared to 90% sensitivity of abdominal CT. The literature supports both conservative management approach as the condition being self limiting with IV antibiotics, hydration and pain control. The risk of developing omental abscess is known in conservative management however risk reported is less.(9) Surgical exploration is warranted in patients with deteriorating condition. However the risks of leaving the necrotic tissue within the peritoneal cavity versus the risks of necrosectomy are unknown. Without necrosectomy pain can persist on an average of 13.5 days (10). It also helps in early discharge and early return of normal activity.

#### CONCLUSION

It is a benign condition which mimics both clinically and radiologically serious intra-abdominal pathology. CT has been shown to be sensitive in diagnosing the condition. The condition can be managed conservatively and surgical exploration is warranted in deteriorating conditions or in alternative diagnosis. Omental necrosectomy reduces the duration of pain and speeds up discharge of the patient and return of normal activity. In summary, consider the diagnosis of omental infarct in presentations of right-sided abdominal pain and consider conservative management, providing serious pathology is reasonably excluded.

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