



Idiopathic Omental Infarction Masquerading As an Acute Abdomen in a Child: A Case Report

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Abstract

Idiopathic omental infarction is a rare cause of acute abdomen in children. The diagnostic dilemma involved in this delay the management. Computed tomography (CT) is the investigation of choice. We present a case of 7 years old boy who presented with features and suspicion of acute appendicitis. The CT revealed the diagnosis as omental infarction and the child was discharged after successful conservative management.

Introduction

Idiopathic omental infarction (IOI) is a rare cause of acute abdomen in children.³ Symptoms can mimic acute appendicitis² or acute cholecystitis, leading to a surgical dilemma. Computerized Tomography (CT) is more likely to diagnose IOI as compared to USG which is commonly used to evaluate acute abdomen. We present a case of IOI which clinically like acute appendicitis. CT clinched the diagnosis leading to successful conservative management.

Case Report

A 7 year old boy presented with acute onset of right sided abdominal pain, nausea and decreased appetite for the past 4 days. He had history of chronic constipation, passing stools once in 2-3 days. There was no history of fever, vomiting or trauma. He had received self prescribed analgesics

without relief. On examination, the abdomen was soft but distended with tenderness elicited in the right hypochondrium and peri-umbilical region. His Total WBC count was 11700 cu/mm with 74% Neutrophils. USG abdomen was equivocal. Appendix could not be visualised. There was no fluid in the Right iliac fossa (RIF). Since he was exquisitely tender locally in right hypochondrium and USG was unhelpful, a CT abdomen was done. CT revealed omental stranding in Right hypochondrium and lumbar region, appendix was partially visualised with no peri-appendiceal inflammation, gall bladder (GB) was reported normal. A diagnosis of Omental Infarction was made. Conservative treatment was continued. He was discharged on day 3. He remained well there after till last follow up at 3 months.



Figure 1. CT Scan Abdomen. A (Axial view), B (Coronal view), C (Sagittal view) – Well defined area of increased attenuation in the right hypochondrial/lumbar omentum with smudging, haziness and ill defined margins.

Discussion

The greater omentum, commonly known as the “Policeman of the abdomen” is a peritoneal remnant with its attachments to the greater curvature of the stomach and the transverse colon and is supplied by the right and left gastroepiploic vessels.⁴ It is spread across the abdomen and is known for its immune function and its ability to physically limit areas of active intraperitoneal inflammation.

Omental infarction has been grossly classified as primary and secondary.^{2,3} Primary OI is in most cases considered idiopathic while common secondary causes include omental torsion, cysts, tumours, abdominal trauma, hypercoagulable states, vasculitis etc. Primary OI has more commonly been observed in obese children.^{1,3} Infarction is thought to be caused due to excessive fat deposition within the omentum leading to compression of its traversing vessels causing infarction.³ Predilection for right sided omental pathology is thought to be due to its longer length and greater mobility as compared to the left.⁵ Male to female ratio is 2:1.⁵

Patients with OI can present with sudden onset abdominal pain more commonly on the right side masquerading as an acute abdomen. The patient may otherwise be constitutionally well with no fever or any gastrointestinal symptoms. Examination may reveal exquisite local tenderness. Clinically, it may be difficult to distinguish them from acute appendicitis. However, subtle differences can be appreciated. The pain in IOI begins in right side while appendicular pain usually begins in periumbilical area (visceral pain) and shifts to Right iliac fossa (RIF) only later when parietal peritoneum irritation starts.

With IOI, the pain is more localised right from the beginning. Although there is exquisite tenderness, constitutionally the child is well with no fever and no progression.

Since treatment of acute appendicitis is surgical but IOI can be treated conservatively, differentiation is important. Towards the goal, CT proves useful and decisive for management.

Haematological and biochemical investigations may be normal or may show features of non-specific inflammatory response.

Management in such cases can be either conservative or operative. Although non operative management is desirable, it is argued that it involves a longer hospital stay and may even lead to complications like omental abscess. Operative treatment involves Laparoscopic omentectomy and is associated with a shorter hospital stay. Our case had localised IOI with no abscess – hence managed conservatively.

Conclusion

IOI should be kept in differential diagnosis of acute abdomen with atypical clinical presentation. Diagnosis is possible by CT. If diagnosed accurately, surgery can be avoided.

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