

## Omental Infarction—an Unrecognized Cause of Acute Abdomen

A 6-year-old boy was admitted to hospital complaining of periumbilical pain of 2 days duration. Pain increased with breathing or coughing and was associated with low grade fever. There was no history of vomiting. The past medical history was unremarkable. The patient weighed 23 kilograms and his oral temperature was 37.2°C. The right side of abdomen was tender especially in right lumbar and right iliac region. Laboratory studies revealed leukocyte count of 11,000/cu.mm, predominantly polymorphs (78%). Other routine investigations were normal. The child was initially treated with intravenous fluids and parenteral antibiotics. Abdominal ultrasound showed little free fluid in the right iliac region, and distended bowel loops. The appendix was not visualized. With a presumptive diagnosis of appendicitis, the child underwent a diagnostic laparoscopy. The bowel loops were adhered to the anterior abdominal wall. On separation, omental infarct of size 3 x 4 x 6 cms was seen. There were no gangrenous changes seen. This was left alone and appendectomy was done. Post operative period was uneventful and the patient was discharged on D-3 of surgery. Histology of the appendix showed a normal vermiform appendix.

Omental infarction is a rarely considered diagnosis for acute abdomen in children. Because of its low incidence and lack of awareness among clinicians, a pre-operative diagnosis of omental infarction is rarely made. The etiology and pathogenesis of this disorder is not known. However, abnormal coagulation profile, autoimmune disorder, trauma, obesity, congenital vascular anomalies with low perfusion and extension from another inflammatory focus have been suggested.<sup>1</sup> In such patients, a mass is usually located in the right upper quadrant of the abdomen.<sup>2</sup> Males are affected twice as often as females. Symptoms may consist of sudden onset of acute abdominal pain, low grade fever and occasional vomiting. Right side omentum is more often affected than the left side.<sup>3</sup> Surgical resection usually results in immediate resolution of symptoms with little or no morbidity.<sup>4</sup> The standard McBurney incision used for suspected acute appendicitis may be inadequate for the

diagnosis and resection of certain omental infarctions, which may be adherent to the ascending colon or anterior abdominal wall.<sup>5,6</sup> Laparoscopic exploration circumvents this difficulty. Successful attempts at non-operative management have been made,<sup>3,7</sup> albeit at a risk of leaving necrotic tissue within the peritoneal cavity. Conservative management leaves the patient with persistent pain requiring prolonged analgesics<sup>3</sup> or abscess formation.<sup>5</sup>

Omental infarction often mimics acute appendicitis pre-operatively.<sup>4</sup> CT scan is usually diagnostic. It delineates the infarcted omentum as a well defined area of high attenuated fat containing hyperattenuating streaks immediately deep to the parietal peritoneum with secondary thickening and inflammation of the overlying anterior abdominal wall.<sup>8</sup>

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