In this section we publish btief case notes that we believe contain information of interest to Canadian surgeons.

Spontaneous rectus sheath hematoma

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A 71-year-old diabetic man was admitted with a 2-day history of acute left lower abdominal pain. He denied any history of trauma or sport activity before admission. On examination he was normotensive and apyrexial. An exquisitely tender abdominal wall mass was felt at the left iliac fossa. The abdominal pain increased and the mass became more prominent when the patient tensed up the abdominal wall. His hemoglobin was 105 g/L, and the leukocyte count was elevated at 15.2×10^9/L. Ultrasonography showed a hypoechoic oval lesion measuring 8 × 10 cm in the left rectus abdominis muscle, consistent with a hematoma. Computed tomography confirmed the marked asymmetry of the rectus sheath (Fig. 1). He was treated conservatively and discharged from hospital 6 days after admission with resolution of signs and symptoms.

Rectus sheath hematoma is an uncommon cause of acute abdominal pain. It is an accumulation of blood in the sheath of the rectus abdominis, secondary to rupture of an epigastric vessel or muscle tear. It could occur spontaneously or after trauma. Other predisposing factors include anticoagulation, blood dyscrasias, previous abdominal operation, laparoscopic trocar injury, subcutaneous injection of drugs and increased intra-abdominal pressure from coughing, straining or pregnancy.[1,2] Rectus sheath hematoma usually occurs in the lower abdominal wall. Firm attachment of the branches of inferior epigastric artery while piercing the rectus abdominis and movement of the body creates shearing forces at arterial branch attachments. There is weaker support of the rectus abdominis by transversalis fascia and peritoneum below the linear semicircularis.[2]

The most common presenting feature is a painful lower abdominal mass that never crosses the midline. Carnett's test is performed by raising the patient's head off the bed while palpating the painful abdominal mass. Tensing up the rectus muscle protects the viscera and lessens the pain from intra-abdominal origin; however, if the source is in the abdominal wall, the pain will remain the same or increase in severity. Imaging can provide the correct diagnosis and exclude an intra-abdominal disorder. Ultrasonography is noninvasive and could accurately demonstrate a fusiform longitudinal mass confined to the abdominal wall. Alternatively, computed tomography and magnetic resonance imaging can also offer accurate anatomical delineation.[3]

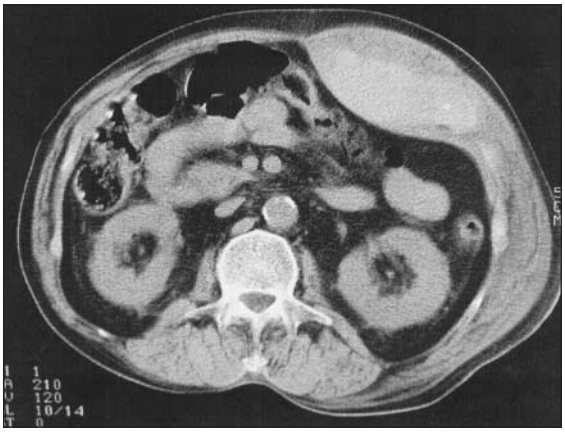

FIG. 1. Computed tomography demonstrates asymmetry of rectus sheath in 71-year-old man with rectus sheath hematoma.

Conservative treatment is favoured for a nonexpanding hematoma causing no hemodynamic compromise. When conservative treatment fails, the hematoma could be evacuated surgically with concomitant ligation of the bleeding vessels. Alternatively, angiographic embolization of the bleeding inferior epigastric artery has also been described.[4]

In summary, awareness of this rare clinical condition is important in the differential diagnosis of acute abdominal pain. Failure to recognize this condition could result in futile laparotomy since the majority of patients with rectus sheath hematoma can be managed conservatively.[2,3]

Competing interests: None declared.

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