Recurrent epiploic appendagitis

Epiploic appendagitis is a non-specific term denoting inflammation of an appendix epiploica. Appendices epiploicae consist of fat-filled processes of peritoneum projecting from the serosa of the large intestine. Although diseases of an appendix epiploica are rare, pathologic changes, including torsion, infarction and incarceration, can occur. Primary epiploic appendagitis is an uncommon condition, resulting from torsion or spontaneous thrombosis of a draining appendiceal vein. In contrast, secondary epiploic appendagitis is the result of inflammation of an adjacent organ and can occur in such conditions as appendicitis and diverticulitis. Small case series of primary epiploic appendagitis have been reported; however, our review of the literature failed to identify a case of recurrent epiploic appendagitis.

Because of the infrequent presentation and nonspecific findings of epiploic appendagitis, it is seldom considered in the differential diagnosis of acute abdominal pain. The most common finding is acute onset of well-localized abdominal pain in the absence of other complaints, although nausea, vomiting and a low-grade fever have been noted. Rao and colleagues reported 11 patients with primary appendagitis. All experienced sudden onset of focal abdominal pain with rebound tenderness, but less than 30% had nausea, vomiting, a change in bowel habit, an elevated leukocyte count or elevated body temperature.

Although laboratory investigations contribute little to the diagnosis, radiologic investigations can be diagnostic. Computed tomographic findings of epiploic appendagitis — an oval-shaped mass lesion with a hyperattenuated peripheral rim and low central density (fat) — are pathognomonic. On ultrasonography, this corresponds to a hyperechoic non-compressible ovoid mass with a hypoechoic contour, representing swelling of the serosa. Computed tomography and ultrasonography are both highly accurate in identifying primary epiploic appendagitis. Rioux and Langis appropriately stated that although computed tomographic and ultrasonographic features are quite characteristic, a differential diagnosis should be considered, since spontaneous infarction or torsion of the greater omentum give similar findings on these investigations. Also, secondary epiploic appendagitis as a result of appendicitis or diverticulitis should be considered.

Historically, the recommended treatment for primary epiploic appendagitis has been ligation and surgical excision. Recently, the accepted mode of therapy has been nonsurgical. This change has come about because of an improved ability to secure a diagnosis preoperatively; previously the diagnosis could only be made at laparotomy. Several studies have reported favourable outcomes using supportive care and analgesics as the primary treatment, demonstrating resolution of pain within 7 to 12 days. For 6 months, Rao and colleagues followed up their 11 patients treated nonoperatively. During that time none of the patients experienced recurrent pain. These authors concluded that primary epiploic appendagitis is a self-limiting benign disorder for which surgery is unnecessary.

The patient in this report was treated surgically on both occasions. Despite computed tomographic findings consistent with primary epiploic appendagitis, treatment consisted of surgical excision. Following surgery, the patient was discharged on the fourth postoperative day without recurrence of symptoms.

FIG. 3. Abdominal computed tomography demonstrates primary epiploic appendagitis. Arrowheads show the appendix epiploica in association with the peritoneum of the anterior abdominal wall.
appendagitis on the initial presentation (Fig. 3), ongoing abdominal pain and concerns about other concomitant conditions led to diagnostic laparoscopy (Fig. 4). On the second occasion, the diagnosis of epiploic appendagitis was suspected at the time of presentation and was confirmed by computed tomography (Fig. 5). Because of ongoing pain persisting after 2 weeks, the patient requested surgical intervention. On both occasions torsion of the appendix epiploica was identified laparoscopically, and the infarcted appendage was excised without complication (Fig. 6).

Primary epiploic appendagitis is a benign, self-limiting condition that can be treated without surgery on most occasions. However, when the diagnosis is uncertain or the patient fails to improve with nonoperative therapy, surgical intervention is warranted.

References