Case Report

Torsion of an Abdominal-Wall Pedunculated Lipoma: A Rare Differential Diagnosis for Right Iliac Fossa Pain

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Pedunculated lipomas arising from the peritoneal wall are a rare finding during abdominal surgery. These benign tumours of mesenchymal origin can arise anywhere in the body and are usually asymptomatic. We present a case of a torted, pedunculated parietal wall lipoma in the right iliac fossa that gave rise to a clinical diagnosis of appendicitis. To our knowledge, such a case has never been reported in the literature previously. We suggest that torsion of a pedunculated parietal lipoma is a rare differential of acute abdominal pain.

1. Introduction

Torsion of intra-abdominal lipomas arising from the mesentery, omentum, and epiploic appendices has been reported as a cause of acute abdominal pain [1–5]. However, lipomas arising from the parietal peritoneum are a rare finding [6]. We present a case of a patient presenting with right iliac fossa pain clinically mimicking appendicitis which was found to be due to a torted, pedunculated parietal wall lipoma at laparoscopy. This is the first time such a case has been reported. The presentation, surgical finding, and management are discussed.

2. Case

A 34-year-old female was referred to the local emergency department by her general practitioner following three days of increasing right iliac fossa pain. The pain was initially described as intermittent but became constant and exacerbated by movement, including coughing. Appetite was significantly decreased and she had two episodes of bloodless diarrhea. She had no fevers, upper respiratory tract symptoms, or urinary symptoms. Her last menstrual period was two days prior to the presentation. Her past medical history included anaemia, hepatitis B carrier state, and uncomplicated delivery of a healthy infant two months previously. She was on no regular medications.

On examination she was normotensive and afebrile. She was noted to have abdominal tenderness in the right iliac fossa with localized rebound and guarding. The rest of her examination was unremarkable. Urinalysis was positive for blood. Routine pathology showed a normal white cell count of $6.5 \times 10^7$/litre, C-reactive protein was not performed, and beta-human chorionic gonadotropin was negative.

The differential diagnoses in the emergency department were appendicitis, ovarian pathology, or renal colic. She was seen by the surgical registrar who felt her presentation was consistent with acute appendicitis and she was fasted, commenced on intravenous fluids and antibiotics, and prepared for theatre. She proceeded to a laparoscopic appendicectomy that evening. Upon entering the peritoneal cavity, blood was noted in the pelvis. The appendix was not grossly inflamed and the uterus, fallopian tubes, and ovaries were macroscopically normal. On the right lower quadrant of the anterior abdominal wall a torted pedunculated lipoma, with acute haemorrhage was noted (see Figure 1). A second untorted pedunculated lipoma was noted inferior-medially and both were resected laparoscopically. Laparoscopic appendicectomy was also performed. Antibiotics were ceased and
constipation who was found to have a pedunculated lipoma of the parietal peritoneum at laparotomy. Primary parietal tumours such as seen in this case are extremely rare [6]. Torsion of intra-abdominal lipomas arising from mesentery, omentum, and epiploic appendices have been reported as causes of abdominal pain [1–5].

While appendicitis remains a clinical diagnosis, early diagnostic laparoscopy has been advocated in acute abdominal pain as it has been shown to increase diagnostic accuracy as well as provide an avenue for surgical intervention [13]. In particular, it has been shown to decrease the rate of negative appendicectomy in young women, such as our patient [14]. In a negative diagnostic laparoscopy, there is merit in removing the normal looking appendix, as almost a third of macroscopically normal appendices will show inflammation on histopathology [15]. In our case, it was felt prudent to remove the macroscopically normal appendix and untorted pedunculated parietal peritoneal lipoma along with the tortured lipoma, in an attempt to avoid a future operation.

While parietal peritoneal lipomas are rare, they remain a differential diagnosis for acute abdominal pain. Pain is usually associated with torsion of the lipoma around its pedicle. In this case, the location of the torted lipoma gave rise to a clinical diagnosis of appendicitis.

While CT is useful for diagnosing acute appendicitis, most intra-abdominal lipomas are found at time of surgery. The exploratory laparoscopy is the best diagnostic method for a tortured pedunculated lipoma. Intraoperatively, the surgeon should carefully examine the parietal peritoneal wall if the appendix is macroscopically normal, in order to exclude this rare differential diagnosis of acute appendicitis. Symptomatic intra-abdominal lipomas are best treated by total excision.

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