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Cecal Volvulus Occurring After Laparoscopic Appendectomy

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ABSTRACT

Less than 2% of cases of intestinal obstruction in adults is caused by cecal volvulus. Although recent abdominal surgery has been implicated, no previous case of cecal volvulus has been reported after laparoscopic appendectomy.

Key Words: Laparoscopy, Laparoscopic appendectomy, Cecal volvulus.

INTRODUCTION

Volvulus of the cecum is an uncommon surgical emergency, accounting for less than 2% of cases of intestinal obstruction in adults.[1] In many patients, no underlying cause can be found, although precipitating factors include adhesions, congenital bands, and distal obstructing lesions. Recent abdominal surgery has been implicated in some cases,[2,3] although no case of cecal volvulus occurring after laparoscopic appendectomy have been reported.

CASE REPORT

A 33-year-old female was admitted with a 12-hour history of central abdominal pain localizing to the right iliac fossa associated with low-grade pyrexia. Her symptoms did not resolve with conservative management, and we elected to perform laparoscopy. At operation, the cecum was positioned normally, and to allow visualization of the appendix, the cecum was mobilized by dividing Ladd's bands. A fecalith was noted in the tip of the appendix, and standard laparoscopic appendectomy was performed. The patient was discharged the following day. Histological examination of the appendix revealed a fecalith at the tip but no evidence of acute inflammatory change.

She returned 24 hours later complaining of severe abdominal pain, distension, and vomiting. Plain abdominal X-ray showed appearances consistent with a cecal volvulus **(Figure 1)**. Laparotomy was performed, and the diagnosis of cecal volvulus was confirmed. The volvulus was reduced, and the cecum was viable. A cecopexy was performed, and the patient made an uneventful postoperative recovery. She was discharged home 5 days postoperatively.

DISCUSSION

Cecal volvulus is an uncommon cause of intestinal obstruction. Its peak incidence in the 30- to 40-year age group means it should be considered in the differential diagnosis of acute abdominal pain in fit, young patients. Although the diagnosis is rarely made on clinical grounds alone, the plain abdominal radiograph shows diagnostic

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Figure 1. This abdominal radiograph shows a greatly distended cecum in the central abdomen, with clips clearly visible at the appendix base in the right upper quadrant.

features in the majority of cases.[4] Typically, a greatly distended cecum is present, which is often in an ectopic location, with a paucity of gas in the right iliac fossa, with or without a single fluid level. Prompt surgical intervention is imperative to prevent the cecum from becoming gangrenous.

Although previous abdominal surgery, particularly appendectomy or gynecological surgery, is recognized as a predisposing factor for cecal volvulus,[2,3] it has not previously been described occurring after laparoscopic appendectomy. Given the relative rarity of the condition, it is impossible to say with certainty whether laparoscopic surgery increases the likelihood of cecal volvulus. However, with the current increasing trend toward minimally invasive surgery, cecal volvulus should be considered as a diagnosis in patients who present postoperatively with abdominal pain and distension.

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