

Letters to the Editor

Stump appendicitis. Underrated reality?

Key words: Stump appendicitis. Appendectomy.

Dear Editor,

Acute appendicitis is the most common surgical emergency performed by the general surgeon, specially during training, and the main reason of surgical acute abdomen in western countries (1). Stump appendicitis is a very rare complication of appendectomy and since first description, in 1945 by Rose (2), about sixty cases have been published (3). We report two cases of stump appendicitis with special emphasis in early diagnosis and treatment, which often is deferred due unexpected (4) resulting in increased morbidity and mortality, high perforation rate and requiring a more extensive surgical resection (3,5).

Case reports

Case 1. A 31-year-old man who had undergone a laparoscopic appendectomy 8 years previously presented with a 3-day history of abdominal pain localized in the right iliac fossa, nausea, vomiting and increase in the leukocyte count (WCC). Diagnosis was confirmed by computed tomography (CT) scan (Fig. 1). Three centimeter residual stump was removed through paramedian approach. Fever at early postoperative time and discharged asymptomatic one week later.

Case 2. A 29-year-old man, laparoscopic appendectomy two years previously at other institution and no clinical information

available, presented with a 3-day history of right iliac fossa tenderness, peritonitis and increase in WCC. Abdominal ultrasound revealed appendiceal stump thickening. A 1.5 cm stump was removed through McBurney's incision and discharged asymptomatic three days later.

Discussion

Stump appendicitis is a poorly defined condition always reported as very rare complication after appendectomy about

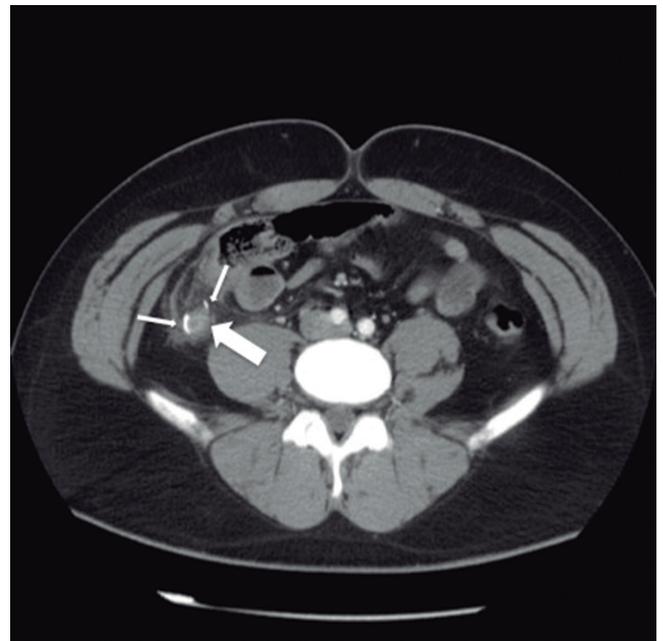


Fig. 1. Computed tomography scan demonstrating appendiceal stump inflammation with thickening of the fat surrounding and lymphadenopathy (thick arrow). Staples of previous surgery corresponding to the appendiceal stump and mesoappendix are observed (thin arrows).

remaining residual appendiceal tissue develops inflammation resulting in clinical features mimicking acute appendicitis in a patient with previously appendectomy. Time from the initial operation ranged from 4 days to 50 years (median, 1 year) after either open or laparoscopic appendectomy (6,7).

The most common clinical presentation is pain starting on right iliac fossa, fever and leukocytosis (6); current reports document up to 60% incidence of perforated stump appendicitis or cecal perforation at the time of surgery (3-5). Some conditions are risk factors (3-5,7-9), complicated appendicitis at initial appendectomy, length of appendiceal stump, with no cases reported with stumps < 0.5 cm, whereas there are no data to support inversion of stump over simple ligation can cause future stump appendicitis as well as laparoscopic surgery over open surgery do not increase the risk, in fact, more than 65% of cases described have occurred after open appendectomy (3,5,7,8). In addition to clinical and physical examination, suspected diagnosis is complemented with imaging, and CT scan seems to be more useful than ultrasound (3,5-7,9). Final treatment is completion appendectomy (3,5,7,8), and successfully nonoperative treatment with intravenous antibiotic therapy is being reported (6).

In conclusion, a high level of suspicion is required in any patient with classic signs and symptoms of appendicitis and prior history of an appendectomy and takes out the idea that prior appendectomy precludes the possibility of stump appendicitis to prevent serious complications.

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