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Appendiceal Diverticulitis - A Case Report

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Rezumat

Diverticulita apendiculară - prezentare de caz

Diverticulita apendiculară este o cauză rară a durerii din fosa iliacă dreaptă. Chiar dacă este simptomatică sau descoperită întâmplător în timpul apendicectomiei sau irigografiei, trebuie înțeleasă evoluția clinică pentru a avea o atitudine terapeutică corectă. În acest articol vom prezenta cazul unei bolnave în vârstă de 50 de ani cu diverticulită apendiculară descoperită întâmplător în timpul apendicectomiei.

Cuvinte cheie: diveticulită, apendicită, chirurgie de urgență, diverticuli

Abstract

Appendiceal diverticulitis is a very rare cause for pain in the right iliac fossa. Whether it is simptomatic or discovered randomly during an appendectomy or barium enema, understanding its clinical evolution is important for having a good management. In this report we present the case of a 50 year old female who underwent an open appendectomy during which we discovered appendiceal diverticulitis.

Key words: diverticulitis, appendecitis, emergency surgery, diverticulae

Introduction

The diverticular disease of the colon is a common condition and about a quarter of people affected by it will experience acute symptoms at some time (1). The most common presentation is uncomplicated acute diverticulitis that can be managed conservatively with bowel rest and

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antibiotics. However, some patients will present with diverticular abscesses or purulent or faeculent peritonitis due to perforated diverticular disease (2).

Kelynak reported appendiceal diverticulitis for the first time in 1893 (3). Appendiceal diverticulosis can be classified in congenital or accquired. The congenital form of this pathology is very rare. The prevalent form is represented by a false diverticulum located on the mesenteric margin of the vermiform appendix.

Case report

We report the case of a 50-year-old woman with intermitent right lower quadrant abdominal pain.

The patient stated that she had had a total histerectomy in 2008 due to a uterine leiomyoma. She also stated that appendectomy had been refused 25 years ago for the same symptoms. The patient did not recall any other pathologies at the moment.

The abdominal examination revealed guarding in the right iliac fossa and a positive psoas sign.

The digital rectal exam was normal.

The patient was admitted to our surgical department for further investigation and professional treatment.

Abdominal ultrasonography showed distended bowels and a minimal fluid collection in the cecoappendiceal region.

Blood tests analyzed presented without modification.

We decided to perform an open appendectomy. Intraoperatively we discovered regional serous fluid, a latero-caecal, gangrenous appendix which presented multiple acutely inflamed diverticulae as can pe seen in *Fig. 1*. Approximately 10 ml of purulent fluid drained from the appendix. The pathological exam showed no malignant cells present. Postoperative evolution was uneventful and the patient was discharged the 4th day.

Discussion

The incidence of diverticula found in appendectomy specimens ranges from 0.004% to 2.1%; from routine autopsies, 0.2% to 0.6% (4).

Pacients with diverticular appendicitis present at the average age of 38 years (4). It is more common in men and in patients with cystic fibrosis (4). Curiously, the patient in this case report is a 50 year old female with no other known pathology except for the uterine leiomyoma operated in 2008.

Appendiceal diverticulitis has been classified in 4 sub-types (3). Type 1 occurs when a normal appendix is found with an acutely inflamed diverticulum. Type 2 implies an acutely inflamed diverticulum with surrounding appendicitis, as is in our case. Type 3 is a normal appendicitis with an incidental uninvolved diverticulum. Type 4 is an incidental appendiceal diverticulum with no evidence of appendicitis or diverticulitis.

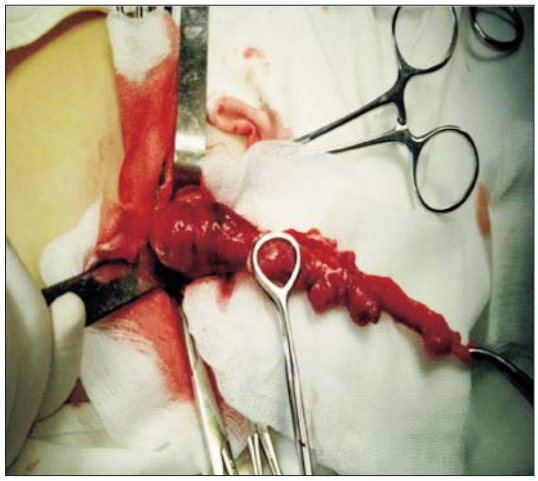

Figure 1. Gangrenous appendix which presents multiple acutely inflamed diverticulae

Acute diverticulitis of the appendix has been shown to be 4 times as more likely as acute appendicitis to perforate (this happens in 66% of cases), increasing mortality 30 times compared to simple appendicitis (3). Several cases of pseudomyxoma peritonei have been reported after appendiceal diverticuli (5). Removal of an appendix with diverticuli is appropriate when found incidentally during surgery or after a barium enema.

Conclusions

Diverticular appenicitis is related with an elevated risk of perforation in comparison to acute appendicitis, as well as an increased risk for synchronic appendicular cancer in 48% of the cases, and colonic cancer in 43%. The incidence of chronic appendicitis has been reported in 1.5% of all appendicitis cases (6), thus the high risk of perforation requires immidiate surgical treatment in patients with a high index of suspicion of acute diverticulitis of the appendix. Appendiceal diverticulosis demonstrates a significant association with obstructing or incidental appendiceal neoplasms.

In conclusion, diverticula of the vermiform appendix are very rare. Appendectomy is the best option if diagnosed intraoperatively.

Appendectomy is recommended to prevent inflammation with possible perforation or to exclude a neoplasm.

Conflict of interest

Vlad Constantin, Bogdan Socea, Alexandru Carâp, Anca Nica and Alexandru Smaranda declare that they have no conflicting interests.

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