Invited Commentary to: “Solitary cecal diverticulitis: report of a case”

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S. Roka and F. Herbst

Division of General Surgery, Department of Surgery, University of Vienna

Alimoglu et al. [1] report the course of a patient with cecal diverticulitis that was misdiagnosed as acute appendicitis. The patient was successfully treated by diverticulectomy and appendicectomy. While acute appendicitis is a common disease, cecal diverticulitis is an uncommon finding in western countries. Both conditions present with similar symptoms and the correct diagnosis of cecal diverticulitis is nearly exclusively made intraoperatively. Incidence of cecal diverticulitis among patients treated for acute appendicitis has been reported between 1 in 220 [2] and 1 in 180 patients [3]. The correct diagnosis is made preoperatively in only 0–24 % [2, 4, 5, 6]. While optimal treatment for acute appendicitis is appendicectomy, treatment of diverticulitis is more sophisticated and also includes conservative therapeutic options. To outline recommendations for diagnosis and treatment, the following questions have to be addressed:

How can cecal diverticulitis be diagnosed preoperatively?

What is the optimal treatment for cecal diverticulitis (uncomplicated or complicated)?

Which surgical approach is most suitable?

Preoperative diagnosis of cecal diverticulitis is difficult by physical examination and routine diagnostic tests (as for appendicitis). Most patients present with right lower abdominal pain and localized peritoneal signs [3]. Abdominal symptoms may be chronic or intermittent [7]. General symptoms like fever, nausea and vomiting can be observed [6]. However, general symptoms are less frequent than in acute appendicitis [8]. Most patients with cecal diverticulitis are in their mid-forties [9], which is slightly older than patients with acute appendicitis and younger than patients with left-sided diverticulitis.

Conventional radiologic examinations are often not helpful. Abdominal x-ray is only useful in case of perforation. Reports about detection of fecoliths on plain radi-

ography are anecdotal [10, 11]. On ultrasound typical hypo- or anechoic structures protruding from the colonic wall (“dome”-sign) can be found in diverticulitis [12]. A recent study showed a high sensitivity and specificity of ultrasound to diagnose right-colonic diverticulitis. In all patients with cecal diverticulitis, who were misdiagnosed as having acute appendicitis by physical examination, correct diagnosis was made by ultrasound [13]. However, in 934 patients with right-lower abdominal pain examined by ultrasound, 408 (43.7 %) patients with pathology of the appendix and 23 (2.5 %) with right colonic diverticulitis were found. In a study performed in an Asian country (Taiwan) the incidence of right-colonic diverticulitis was very low. Differential diagnosis between appendicitis and diverticulitis can also be performed by computed tomography (CT) [14]. CT is not as accurate as ultrasound. Best results have been obtained with thin-section helical unenhanced CT. In a prospective series of 109 patients with suspected acute appendicitis seven out of 8 patients with cecal diverticulitis were diagnosed by CT [15]. Magnetic resonance tomography has been used to confirm acute appendicitis as well [16, 17]. The method has also been shown to be effective in diverticulitis of the left colon [18], but has not been used for differential diagnosis of right lower abdominal pain. In general, preoperative differential diagnosis of right lower abdominal pain by various radiological tests is possible with high accuracy.

In western countries cecal diverticulitis in patients presenting with right-lower abdominal pain is expected in less than 1 %. This low incidence does not justify routine radiological tests. Radiologic tests are only indicated in patients presenting with “atypical symptoms” of acute appendicitis.

Clearly, preoperative diagnosis of cecal diverticulitis would influence treatment decision. In cases of uncomplicated cecal diverticulitis, conservative therapy (systemic antibiotics) would be initiated first, and in the event of complicated cecal diverticulitis (perforation), a different surgical approach would be chosen. About half of patients with diverticulitis have covered perforations [2] as also described in the case report by Alimoglu [1]. Even

Correspondence: F. Herbst, M. D., Division of General Surgery, Department of Surgery, University of Vienna, Währinger Gürtel 18–20, 1090 Vienna, Austria.
Fax: ++43/1/ 40400–6163
E-mail: f.herbst@akh-wien.ac.at

in these patients a wait and see policy could be initiated. Free perforation of cecal diverticulitis is rare [2].

In case of unclear diagnosis we recommend laparoscopy. However, in the majority of cases the surgeon will diagnose cecal diverticulitis intraoperatively during appendectomy. Treatment decision in this case not only depends on local findings, but also on forensic aspects (patient information and informed consent). In case of uncomplicated diverticulitis we recommend appendectomy with drainage and a course of systemic antibiotic therapy [19, 20]. If limited, mild inflammation is present, diverticulectomy will solve the problem. Only in case of extensive inflammation or perforation, ileocolonic resection should be considered.

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Invited Commentary to: “Phase II trial using gemcitabine as monochemotherapy in patients with metastasized pancreatic cancer”

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F. Kober and K. Glaser

Department of Surgery, Kaiserin Elisabeth Hospital, Vienna, Austria

The article by Meyer et al. [4] confirms the widely accepted statement that gemcitabine has a beneficial influence on disease progression in patients with advanced pancreatic cancer. Especially with the low dosage of

1000 mg/m² BSA (body surface area) that was used in this study, the rate of adverse effects is low and the favourable effect on quality of life therefore easy to document. As Meyer et al. state themselves, the median survival of 9.1 months is surprisingly high for the applied regimen and is probably due to the possibility of second or third line therapy, which the study design allows for. This immediately raises the open questions about chemotherapy in pancreatic cancer: which dosage should be used? A short infusion or a fixed rate infusion over two

Correspondence: F. Kober, M. D., Department of Surgery, Kaiserin Elisabeth Hospital, Huglgasse 1–3, 1150 Vienna, Austria.

Fax: ++43/1/981 04–4109

E-mail: friedrich.kober@wienkav.at