

# Peritoneal carcinomatosis mimicking a perforated diverticulitis

Olivier Facy, Nicolas Lagoutte,  
Brice Paquette, Patrick Rat,  
Pablo Ortega Deballon

Department of Digestive Surgical  
Oncology, University Hospital of Dijon,  
France

## Abstract

We report the case of a patient with a pelvic abscess and a malignant pancreatic tumor. The management of this complicated diverticulitis included radiological drainage and surgery. This abscess was due to a peritoneal carcinomatosis originating from the pancreas, which is an extremely rare cause of intestinal perforation.

## Case Report

A 83-year-old woman was admitted to the emergency department for abdominal pain. At physical examination, she had fever and a hypogastric pain with tenderness and guarding. A blood analysis showed 15,000 leukocytes/mm<sup>3</sup> and elevated C-reactive protein (340 mg/L). The abdominal computed tomography (CT) revealed a pelvic abscess (Figure 1) and discovered a solid tumour of the caudal pancreas with splenic vein thrombosis and segmental portal hypertension (Figure 2). A perforated sigmoid diverticulitis was diagnosed associated with a pancreatic neoplasm. A radiological drainage of the abscess was performed, as well as a biopsy of the pancreatic mass, revealing a pancreatic adenocarcinoma. Two weeks later, a colonoscopy showed an inflammatory stenosis of the left colon. The clinical evolution was fair and a surgical management was decided both for the colon and the pancreas. Surgery was scheduled for the next month and the patient was discharged. She returned to the surgical department 10 days later for diffuse abdominal pain. An abdominal CT-scan showed a pneumoperitoneum with diffuse fluid within the abdomen (Figure 3). An emergent laparotomy was performed, finding a perforated pseudotumoral sigmoid with diffuse fecal peritonitis and two nodules of carcinomatosis in the major omentum. A Hartmann's procedure was performed. The pathological examination revealed a peritoneal metastasis from the pancreatic cancer involving the sigmoid and causing the perforation. The patient died two weeks later.

## Discussion

Pancreatic adenocarcinoma is the third cause of non gynaecological carcinomatosis, after colonic and gastric cancer.<sup>1</sup> It may present as clinically evident ascitis, but it is more frequently discovered at preoperative imaging or during surgery.<sup>2</sup> Peritoneal carcinomatosis involving the bowel causes usually acute or subacute obstruction. Bowel perforation is well known as a complication of colon cancer or colonic wall haematogenous metastases, by the growing of the tumour from the inside to the outside.<sup>3</sup> Inversely, in this case the mechanism was the growing of the peritoneal nodule from the serosa through the colonic wall layer until the mucosa leading to perforation. This is an atypical presentation of peritoneal carcinomatosis from pancreatic origin, revealing the neoplasm. When the carcinomatosis is already known, physicians must keep in mind these complications for an early management despite a very bad prognosis.

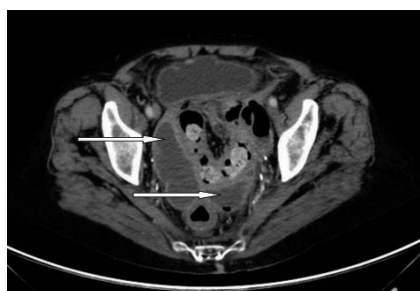


Figure 1. Initial computed tomography. Two pelvic abscess (arrows) beside the sigmoid colon.



Figure 2. Initial computed tomography. Tissular tumor of the caudal pancreas (long arrow) with a splenic vein thrombosis and a segmental portal hypertension (short arrow).

Correspondence: Olivier Facy, Department of Digestive Surgical Oncology, University Hospital of Dijon, 14 rue Gaffarel 21079 Dijon cedex - France. E-mail: olivier.facy@chu-dijon.fr

Key words: carcinomatosis, pelvic abscess, perforation.

Contribution: OF, POD, PR, manuscript elaboration; NL, searching references; BP, searching illustrations. All authors read and approved the manuscript.

Conflict of interest: the authors report no conflicts of interest.

Received for publication: 19 March 2011.  
Accepted for publication: 1 April 2011.

This work is licensed under a Creative Commons Attribution 3.0 License (by-nc 3.0).

©Copyright O. Facy, 2011  
Licensee PAGEPress, Italy  
Clinics and Practice 2011; 1:e14  
doi:10.4081/cp.2011.e14

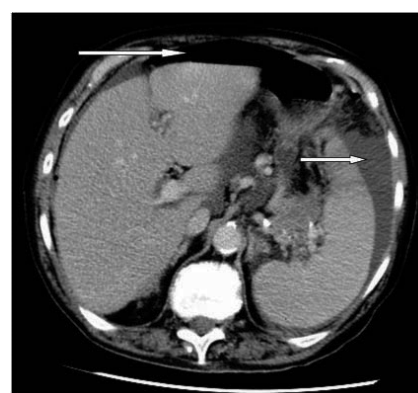


Figure 3. Emergency computed tomography one month later. Pneumoperitoneum and diffuse liquid in the left upper abdomen.

## References

1. Sadeghi B, Arvieux C, Glehen O, et al. Peritoneal carcinomatosis from non-gynecologic malignancies: results of the EVO-CAPE 1 multicentric prospective study. *Cancer* 2000;88:358-63.
2. Glehen O, Osinsky D, Beaujard AC, Gilly FN. Natural history of peritoneal carcinomatosis from nongynecologic malignancies. *Surg Oncol Clin N Am* 2003;12:729-39.
3. Cheynel N, Cortet M, Lepage C, et al. Incidence, patterns of failure, and prognosis of perforated colorectal cancers in a well-defined population. *Dis Colon Rectum* 2009;52:406-11.