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A Rare Case of Ileal Metastasis from Cervical Cancer

L. Iliescu[1], L. David[2], C. Orban[3], V. Herlea[4], L. Toma[1]

[1]Department of Internal Medicine; [2]Department of General Surgery; [3]Department of Anesthesiology; [4]Department of Pathology
Fundeni Clinical Institute, Bucharest, Romania

Rezumat

Metastaza ileală a unui neoplasm de col uterin - prezentare de caz

Raportăm cazul unei paciente în vârstă de 70 ani, internată în clinica noastră pentru un sindrom subocluziv. Din antecedente reținem neoplasm de col uterin tratat prin radioterapie și excizie în urmă cu 2 ani. Examenul CT de control relevă nodul hepatic și obstrucție intestinală. Se intervine chirurgical pentru excizia nodulului hepatic cu suspiciune de metastază și rezolvarea obstrucției intestinale. Intraoperator se decelează o formațiune tumorală de ileon terminal care a determinat obstrucția. Examenul anatomo-patologic pune diagnosticul de metastază ileală din neoplasmul de col uterin; în schimb nodulul hepatic reprezintă doar o arie de steatoză focală densă.

Cuvinte cheie: cancer de col uterin, metastaza ileală, ocluzie intestinală

Abstract

We present the case of a 70-year-old woman, with a history of radiation-treated and surgically- resected cervical cancer, who was admitted to our clinic for intermittent subocclusive symptoms. CT scan revealed a liver nodule and intestinal obstruction. The patient underwent surgery for excision of suspected liver metastasis and resolution of intestinal obstruction. Intraoperatively an ileal tumour was found to be the cause of the obstruction. Anatomo-pathological findings were consistent with an ileal metastasis from the cervical cancer. The liver nodule was only an area of focal steatosis.

Key words: cervical cancer, ileal metastasis, intestinal obstruction

Corresponding author: Iliescu Elena Laura, MD
no. 67, Maior Alexandru Campeanu street
sector 1, code 011236, Bucharest, România
E-mail: laura_ate@yahoo.com

Introduction

Cervical cancer is one of the most common malignancies, ranking third in all types of cancer in women. If undetected in time, it metastasises through lymph nodes; the most common metastatic sites are the lungs, the bones, the para-aortic lymph nodes, the abdominal cavity and the supraclavicular nodes.

Case report

We present the case of a 70-year-old woman who was admitted to our clinic for intermittent subocclusive symptoms, fatigue, nausea and an altered general status. The patient was a known insulin-requiring diabetic. Two years earlier she had been diagnosed with squamous cell cervical cancer (FIGO stage IIA1) and had undergone radiation therapy followed by curative surgery (Wertheim protocol). A control CT scan revealed a 14/17mm hypoechogenous nodule in the right liver lobe with irregular margins, suggesting a liver metastasis (Fig. 1). Also, one of the ileal loops appeared to be dilated with a downstream stricture. The patient was admitted to our clinic for further evaluation and choice of therapy. Physical examination revealed diffuse abdominal pain, without signs of peritoneal

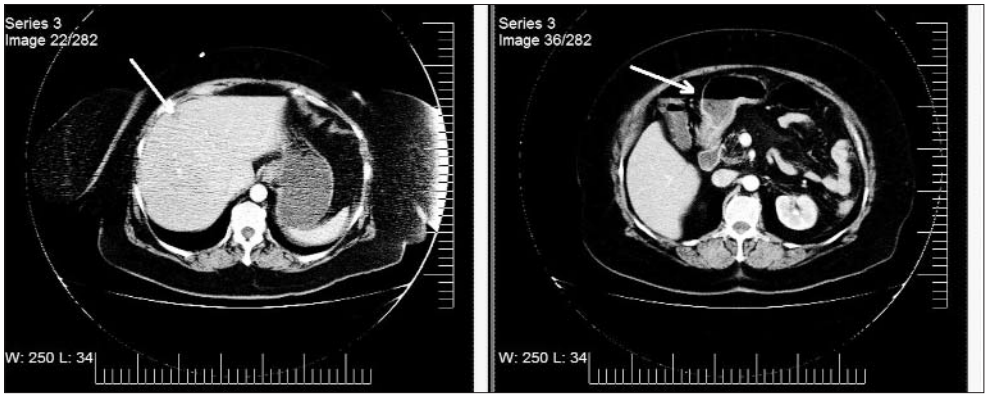

Figure 1. *CT scan showing liver nodule in the 4th-8th segment and dilatation of intestinal loops*

irritation. Abdominal ultrasound showed a small amount of liquid in the right iliac fossa; contrast ultrasound revealed a hypo-echogenous nodule of 15/17 mm in the right liver lobe, 4th segment. During the hospital stay, the patient's status altered, with signs of GI obstruction: constipation followed by vomiting. An abdominal X-ray revealed no pneumoperitoneum, but multiple fluid-air levels in the small bowel. The symptoms were relieved after the insertion of a naso-gastric tube. As there appeared to be only one liver metastasis, a decision was made to subject the patient to open surgery in order to excise the liver nodule and to discover the cause of the GI obstruction. Intraoperatively the liver nodule was removed and an ileal tumour was found to be the cause of the intestinal obstruction (Fig. 2). There were no signs of peritoneal or lymph node involvement. A segmentary intestinal resection with end-to-end anastomosis was performed. The patient was discharged a week after the intervention in relatively good health. The anatomo-pathological examination of the pieces revealed two surprising aspects. The liver nodule was in fact a dense area of fatty liver tissue. However the ileal mass was found to be a metastasis from the squamous cell carcinoma, G2-G3 degree of differentiation, invading the entire intestinal wall (Figs. 3, 4).

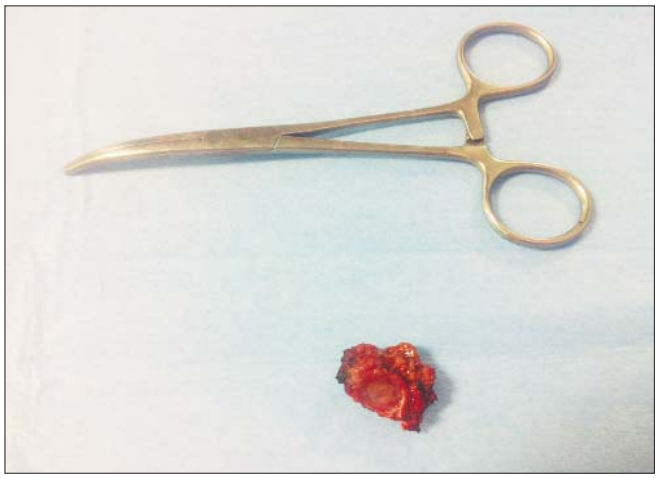

Figure 2. *Liver nodule surgically removed*

Discussion

Squamous cell cancer is the most frequent type of neoplasia involving the cervix. (1) According to the 2012 Guidelines curative therapies are radical surgery or radiation therapy. However, a study performed by Benedetti-Panici et. all (2)

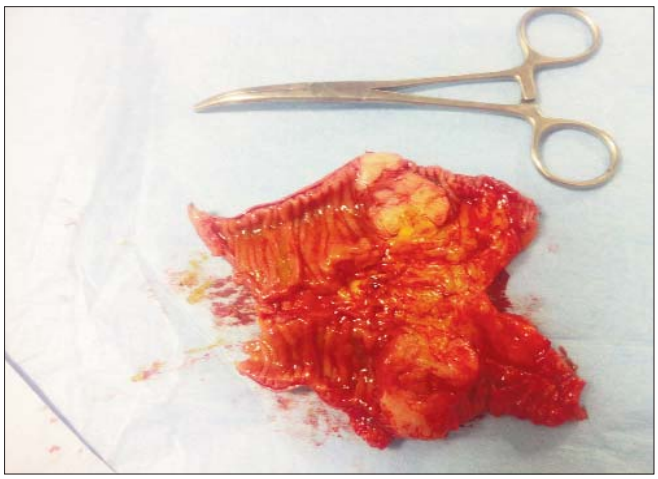

Figure 3. *Resection piece: ileal tumor*

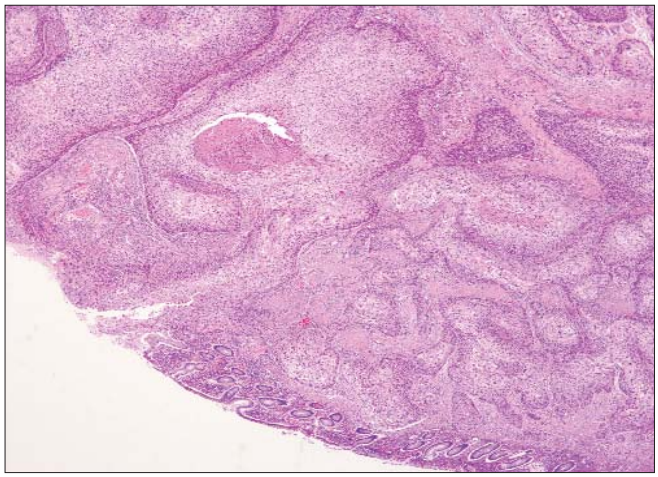

Figure 4. *Optical microscope image x4, hematoxylin - eosin stain. Mucosa aspect of ileal metastasis.*

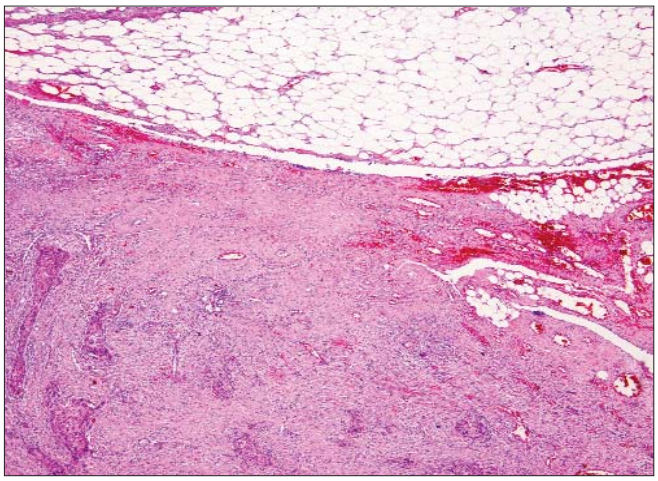

Figure 5. *Optical microscope image, x4, hematoxylin- eosin stain. Serosa aspect of ileal metastasis*

demonstrated that neoadjuvant chemotherapy associated with radical surgery had better result than radiation therapy in early stages; this was not the case in our patient.

A subocclusive syndrome in an oncological patient can point out several differential diagnoses: metastasis, simultaneous neoplasia, radiation enteritis in patients who underwent this therapy, postoperative peritoneal adherences, ileus. Our patient's symptoms might have been caused by radiation enteritis, which can manifest itself by fibrosis with structuring. (3) Metastatic tumors represent the most common tumors involving the small intestine in many series. (4) Metastasis can occur from melanoma (the most frequent), or carcinomas from the liver, stomach, large bowel, testis, ovaries, uterus, cervix, kidneys. (5) There are case reports that describe simultaneous discovery of primary tumour and ileal metastasis (6) or early discovery of the ileal metastasis after the primary tumour. (7) Unlike these, our patient presented with subocclusive syndrome two years from the treatment of the initial lesion. This symptomatology is the most common in intestinal metastasis. (6) The dissemination routes include: hematogenous dissemination, lymphatic dissemination, direct extension by continuity and peritoneal seedlings. (7) In our case, we suspect that permeation was probably the dissemination route, as the patient did not have vascular, lymphatic or peritoneal involvement.

Regarding the liver nodule, the result of the biopsy may not be as surprising as it seems. Focal involvement poses diagnostic problems because the hypodense appearance on CT makes it difficult to differentiate fatty infiltration from metastatic disease, particularly when multiple lesions are present. (8) Kröncke et all suggest that the best way to differentiate a focal steatosis from a liver metastasis is by performing an MRI. However, our patient had a high suspicion of liver metastasis; besides, the subocclusive syndrome imposed the surgical approach rather than another imaging technique.

References

1. Colombo N, Carinelli S, Colombo A, Marini C, Rollo D, Sessa C. Cervical cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2012;23 Suppl 7:vii27-32.
2. Benedetti-Panici P, Greggi S, Colombo A, Amoroso M, Smaniotto D, Giannarelli D, et al. Neoadjuvant chemotherapy and radical surgery versus exclusive radiotherapy in locally advanced squamous cell cervical cancer: results from the Italian multicenter randomized study. J Clin Oncol. 2002;20(1):179-88.
3. Steven M. Cohn, Stephen J. Bickston. Radiation injury in the gastrointestinal tract, in Tadataka Yamada et al, editors, Textbook of Gastroenterology, 5th ed. Blackwell Publishing; 2009. p. 2831-2844.
4. Fabrizio Michelassi, Danny M. Takanishi Jr. Management of Benign and Malignant Small-Bowel Neoplasms. In: Mitchell C. Posner, Everett E. Vokes, Ralph R, eds. Cancer of the Upper GI tract. Weichselbaum: American Cancer Society; 2002. p. 373-405.
5. Robert S. Bresalier, Sharmila Anandasabapathy. Tumors of the small intestine. In: Tadataka Yamada et al, eds. Textbook of Gastroenterology, 5th ed. Blackwell Publishing; 2009. p. 1322-1343.
6. Mathur S K, Pandya G P. Solitary metastatic malignant stricture of the ileum : a rare cause of small bowel obstruction (a case report). J Postgrad Med. 1984;30(3):186-8.
7. M Abdulmajed, A Ghalib, M Mohamed. Intestinal metastasis from primary epidermoid anal carcinoma in a 34 year old male presented with acute bowel obstruction. J. surg. case rep. 2012; (2):1.
8. Kröncke TJ, Taupitz M, Kivelitz D, Scheer I, Daberkow U, Rudolph B, et al. Multifocal nodular fatty infiltration of the liver mimicking metastatic disease on CT: imaging findings and diagnosis using MR imaging. Eur Radiol. 2000;10(7):1095-100.