

Case Report

Intestinal obstruction due to malign breast neoplasm and peritoneal carcinomatosis: a case report

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ABSTRACT: Peritoneal carcinomatosis due to breast cancer is rare and gastrointestinal tract involvement is also unusual. Symptoms are unspecific and can begin many years after the primary tumor. Investigation of carcinomatosis origin is mandatory as breast cancer carcinomatosis can relieve partially or totally with chemo and hormonal therapy. A case of colonic obstruction due to carcinomatosis secondary to breast cancer is reported, emphasizing its diagnostic aspects and treatment.

Keywords: intestinal obstruction; /secondary; breast neoplasms; carcinoma; abdomen, acute.

RESUMO: A carcinomatose peritoneal secundária ao câncer de mama é entidade rara e o comprometimento do trato gastrointestinal é pouco frequente. A sintomatologia bastante inespecífica dificulta o diagnóstico e os sintomas podem surgir vários anos após o aparecimento do tumor primário. O diagnóstico da origem da carcinomatose é fundamental, pois quando a doença é secundária à neoplasia de mama, pode ocorrer remissão parcial e até total da doença com quimio e hormonioterapia. Relata-se caso de obstrução colônica devido a carcinomatose peritoneal secundária a neoplasia maligna de mama, com ênfase em seu diagnóstico e tratamento.

Palavras-chave: obstrução intestinal; /secundário; neoplasias da mama; carcinoma; abdome agudo.

INTRODUCTION

Breast cancer is the most frequent malignant tumor in women¹⁻⁴, but peritoneal carcinomatosis due to breast cancer is rare¹, accounting from 6 to 8% of breast adenocarcinoma cases^{4,5}.

Metastatic lesion of breast cancer usually affects lymphatic ganglions, bones, lungs, brain and liver¹⁻³. More rarely, it may also affect the gastrointestinal tract, peritoneum and genital organs^{1,4}.

Its very unspecific symptoms make diagnosis more difficult and they may appear several years after the primary tumor^{1,3}. The investigation of carcinomatosis origin is mandatory, as breast cancer carcinomatosis can relieve partially or totally with proper chemo and hormonal therapy¹.

The lobular type of the disease is more associated with metastases in the gastrointestinal tract, genital organs and peritoneum¹⁻⁴.

The purposes of this report were to describe a case of colonic obstruction due to peritoneal carcinomatosis secondary to malignant breast neoplasm and make a literature review.

CASE REPORT

A 62-year-old female patient, born in Salto Grande (SP) and living in Santo André (SP), retired, presented for three months changes in the bowel habit – one in three days, associated with distension and abdominal pain like cramps and loss of 20 kilos in the period. The patient presented history of hy-

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pothyroidism, treated with Puran T4 100 mcg/day and right mastectomy and hormonal therapy due to malignant breast neoplasm ten years before. The physical examination detected globus and tympanic abdomen, a little distended, no pain at superficial and deep palpation, no palpable mass and bowel sounds were present and normal. The proctologic exam was performed until 20 cm from the anal canal, with normal mucosa. The colonoscopic study was performed until the transverse colon with luminal stenosis and preserved mucosa, blocking the device progression. Biopsies were made with samples from the site, whose histopathological result showed unspecific chronic inflammatory process. Abdominal tomography showed liver without alter-

ations and colonic dilatation, with abrupt interruption at the transverse colon level, as well as greater omentum thickening (Figure 1). Tomography of thorax was normal (Figure 2).

As illustrated in Figure 3, the opaque enema showed free progression of rectal contrast until distal transverse colon, with inadequate filling at this level.

High digestive endoscopy until the second duodenal portion showed mild enanthematous gastritis. The serum level of carcinoembryonic antigen (CEA) was 2.7 ng/dL.

The patient was submitted to exploratory laparotomy, which showed peritoneal carcinomatosis (Figure 4) and involvement of distal transverse colon, with the omentum full of carcinomatosis nodules.

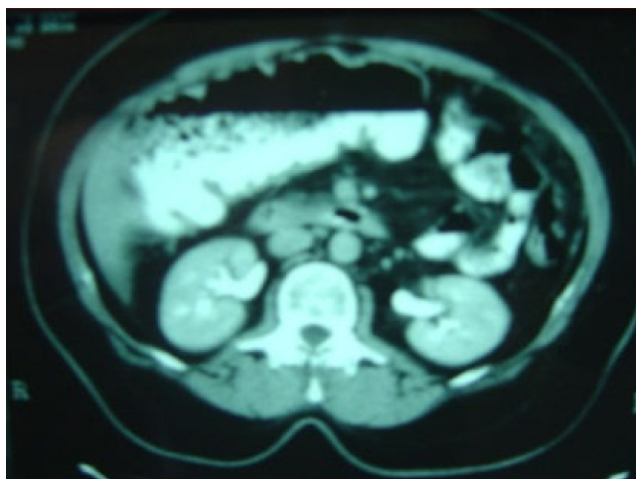


Figure 1. Abdominal tomography showing colonic dilatation.

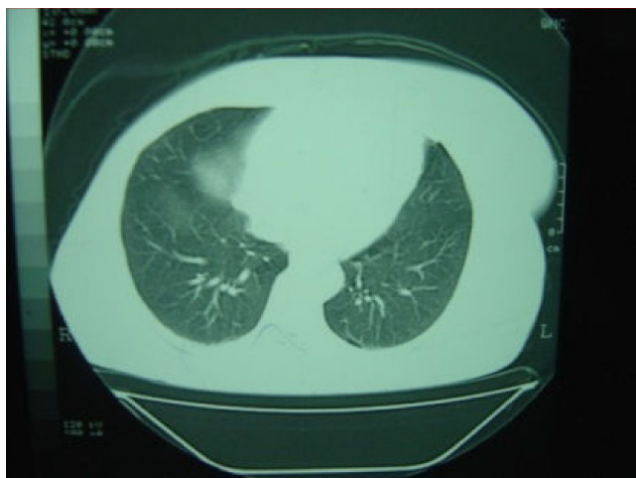


Figure 2. Normal tomography of thorax.

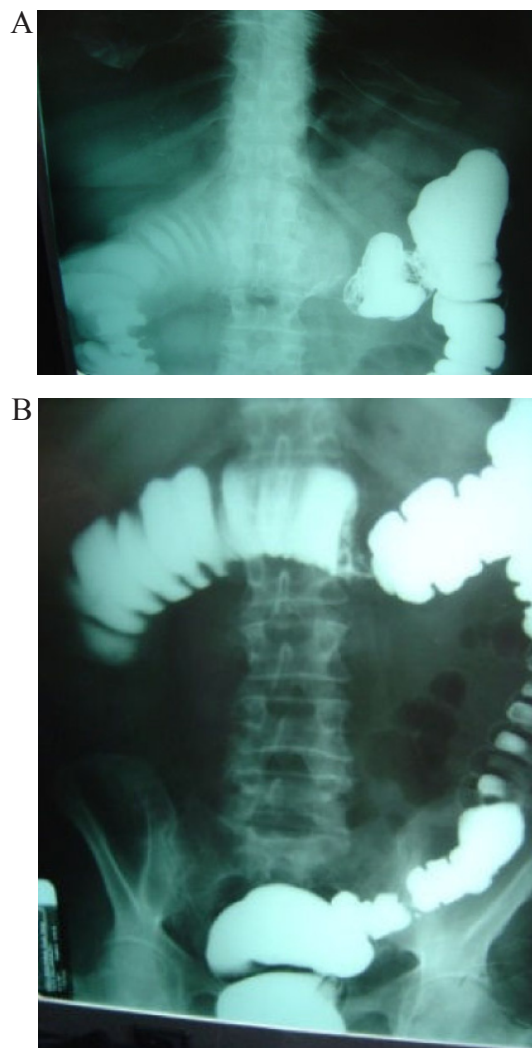


Figure 3. Opaque enema with inadequate filling in transverse colon.

A small portion of the omentum was resected for derivative transversostomy proximally to stenosis. The histopathological analysis of the omentum showed adenocarcinoma infiltrating adipose tissues (Figure 5) and the immunohistochemical analysis showed 90% of the

cells positive to markers SP1 (estrogen receptor) and PgR636 (progesterone receptor), as well as presence of positiveness to cytokeratin 7 (CK7), showing primary breast adenocarcinoma (Figure 6).

The patient was submitted to adjuvant chemotherapy with Adriamycin 60 mg/m² and Paclitaxel 175 mg/m² and hormonal therapy with Anastrozole (Arimidex®) 1 mg/day, showing improved general conditions and weight gain. Control exams showed absence of omentum thickening, normal liver and un-specific distribution of intestinal loops (Figure 7)

In Figure 8, the opaque enema shows persistent stenosis of transverse colon, with difficult progression of rectal contrast until the colostomy.

The patient was submitted to a new exploratory laparotomy, without evidence of carcinomatosis,

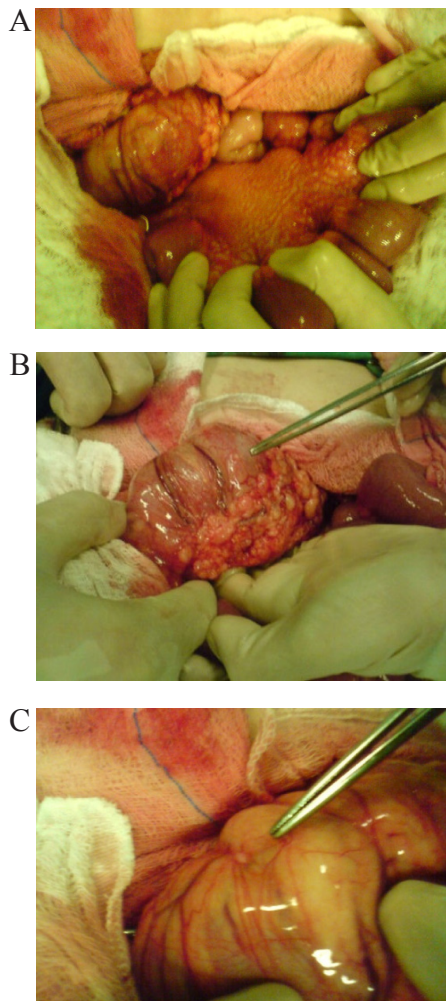


Figure 4. Peritoneal carcinomatosis with distal transverse colon obstruction.

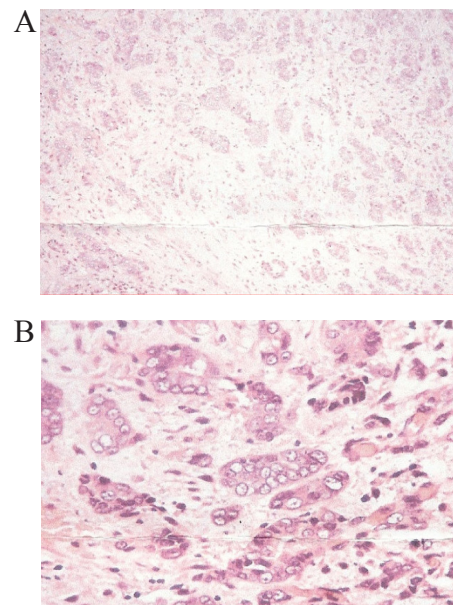


Figure 5. Histopathological analysis: adenocarcinoma infiltrating adipose tissues.

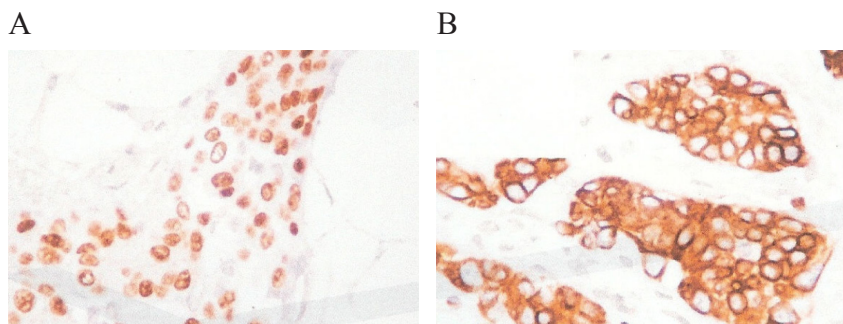


Figure 6. Immunohistochemical analysis with positive markers of breast cancer:

which found the cicatricial stenosis of transverse colon, and a segmental colectomy was performed involving the area of stenosis, as well as colostomy with reconstruction of intestinal flow and termino-terminal colonic anastomosis (Figures 9 and 10).

The histopathological study of the specimen showed no evidence of neoplasm, only cicatricial tissue.

The patient presented good progress and was discharged from hospital six days after the surgery. Today, the patient is in 27-month follow-up, without symptoms and free from the disease.

DISCUSSION

The infrequent occurrence of peritoneal carcinomatosis due to breast adenocarcinoma and its unspecific symptoms make its diagnosis more difficult⁴.

In the case reported, despite the endoscopic and contrast radiological and tomographic investigations in the preoperative period, it was not possible to diagnose it on this occasion, but only confirm the site with the probable obstruction, which has also been found by other authors¹. The definitive diagnosis was only achieved after the histopathological and immunohistochemical analysis of a fragment of the omentum obtained through exploratory laparotomy.

In cases of history of breast neoplasm with any gastrointestinal tract manifestation, the secondary involvement due to breast neoplasm should be con-

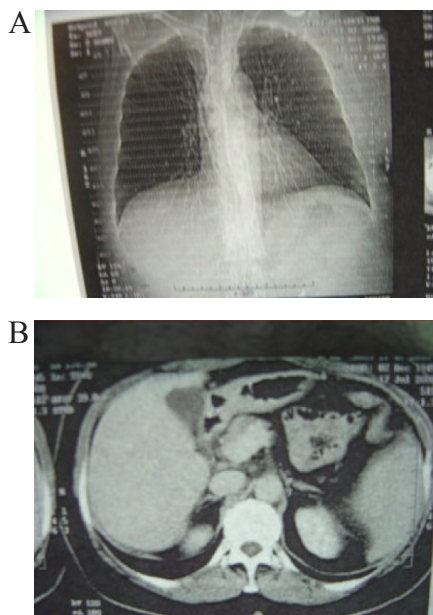


Figure 7. (A) thorax X-ray and (B) abdominal tomography with normal aspect after chemotherapy and hormonal therapy.

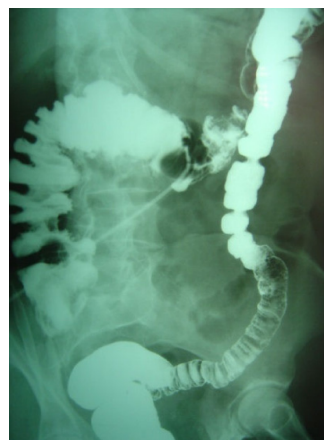


Figure 8. Free progression of contrast, with difficult progression until the stoma.

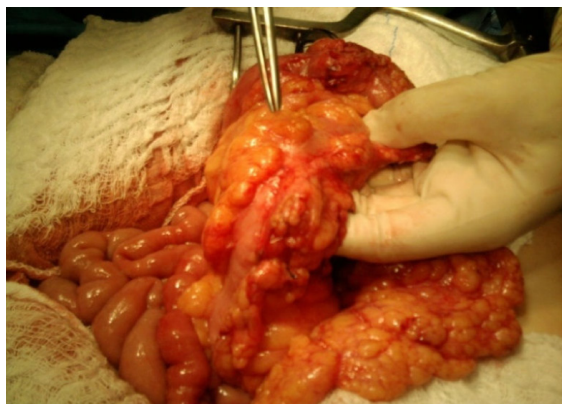


Figure 9. Absence of carcinomatosis.



Figure 10. Surgical specimen (colostomy and stenosis).

sidered as one of the hypotheses and, whenever possible, confirm the finding with immunohistochemical exams⁶. The immunohistochemical markers that can help in this diagnosis are the expression of cytokeratin 7, estrogen and progesterone receptors and negativity to cytokeratin 20^{1,6}, also used in this case.

The interval between the primary disease appearance and the peritoneal carcinomatosis may vary from months to 30 years, average interval of 6 years¹; in this case, this interval was 10 years.

It was not possible to identify the histological type of breast adenocarcinoma that affected the patient in question and, therefore, we cannot correlate the finding of carcinomatosis to lobular or ductal type.

Surgical interventions are used only to resolve complications, considering that this is a disease with systemic dissemination⁴, as performed here, with exploratory lap-

arotomy required for intestinal derivation due to partial bowel occlusion and to help achieve the diagnosis.

The patient remains fully asymptomatic, 27 months after the secondary disease diagnosis, as she presented a good response when submitted to chemotherapy and hormonal treatment. This finding agrees with the average survival presented in these cases, which is 24 to 36 months⁴.

CONCLUSION

In cases of peritoneal carcinomatosis and history of breast adenocarcinoma, the investigation of the carcinomatosis origin is essential, as good alleviation can be obtained with a specific treatment.

Chemotherapy associated with conservative surgeries can also provide good quality of life.

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