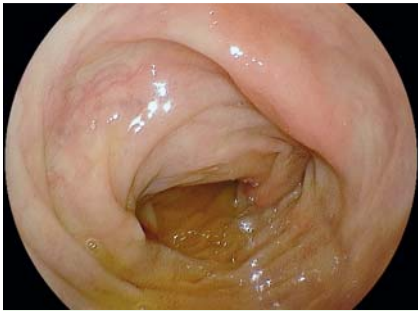


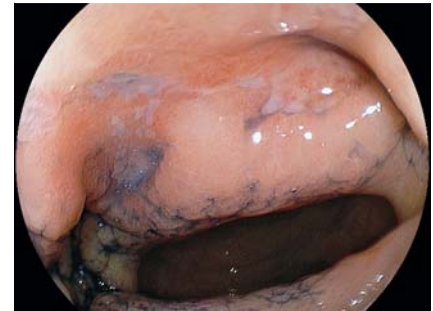
## Breast cancer metastasis to the colon



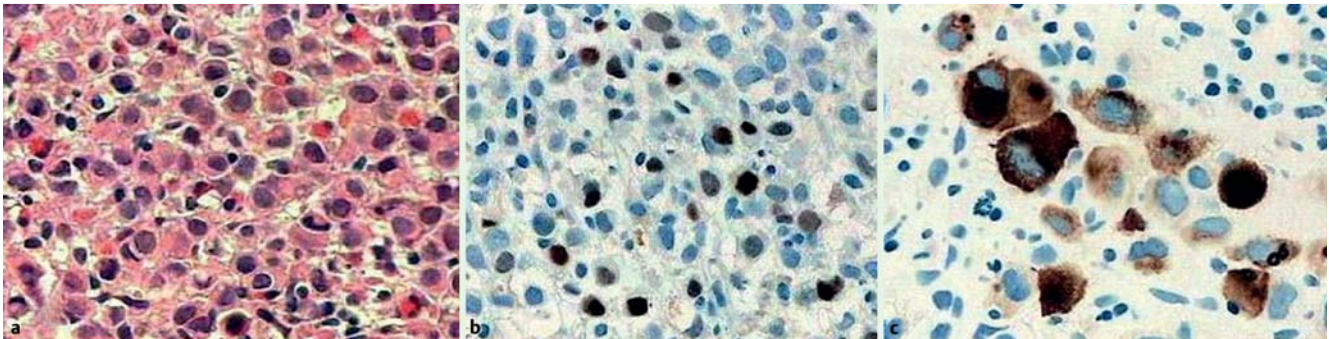
**Fig. 1** Colonoscopy in this 74-year-old woman showed irregular areas, nodulation, and ulceration in the ascending colon.



**Fig. 2** Chromatography using indigo carmine showed stricture of the ascending colon with a friable, ulcerated lesion.



**Fig. 3** Chromatography at high magnification showed the lesion to have a V<sub>i</sub> pit pattern.



**Fig. 4** **a** Hematoxylin and eosin staining showed a poorly differentiated carcinoma ( $\times 400$ ). **b, c** Immunohistochemical findings: **b** estrogen receptor expression ( $\times 400$ ), **c** gross cystic disease fluid protein 15 (GCDFP-15) ( $\times 400$ ).

Breast cancer is one of the most common cancers afflicting women and the second leading cause of cancer death [1]. About 60% of patients have distant metastases at the time of diagnosis. Diagnosis at an early stage increases survival rates. However, even after a long disease-free interval, long-term survivors risk developing metastatic tumors. Common sites of metastasis for breast cancer are bones, lungs, the central nervous system, and the liver; gastrointestinal involvement is rare [2–5]. There have been a few reports of colonic metastasis of breast cancer, mostly in patients with disseminated disease. Tohfe et al. [1], Law et al. [2], and Kilgore et al. [3] described one case each, and Michalopoulos et al. [4] reported two cases of breast cancer metastasis to the colon. We report a case of colonic metastasis from breast cancer 7 years after mastectomy and chemotherapy.

A 74-year-old woman complained of weakness, anemia, intestinal blood loss, and diarrhea. She had undergone right radical mastectomy followed by chemo-

therapy for an infiltrating lobular breast tumor 7 years previously. The workup, including a chest X-ray and computed tomography (CT) of the thorax, abdomen, and pelvis, was normal. Serum levels of Ca 15–3 and CEA had gone up in the past month. Magnetic resonance imaging (MRI) revealed thickness of the ascending colon and cecum wall with localized enlarged lymph nodes. The patient had undergone colonoscopy 6 months previously that revealed sigmoid diverticular disease and a sigmoid adenoma, which was resected by mucosectomy. A new colonoscopy showed a stricture of the ascending colon with a friable, ulcerated lesion, which was biopsied (► Figs. 1, 2). Chromatography at high magnification showed the lesion to have a V<sub>i</sub> pit pattern according to Kudo's classification (► Fig. 3). The pathological evaluation of the tissue using hematoxylin and eosin staining showed a poorly differentiated carcinoma (► Fig. 4 a). Immunohistochemical staining of the colon biopsy specimen showed surface epithelium with the lamina propria infil-

trated by tumor cells with abundant eosinophilic cytoplasm, many with eccentric nuclei, intracytoplasmic lumina, and a signet-ring appearance. The specimen tested positive for cytokeratin 7, estrogen receptor, and gross cystic disease fluid protein 15 (GCDFP-15)/Breast-2 protein, confirming it to be a lobular breast carcinoma metastasis (► Fig. 4 b, c). The patient is receiving systemic chemotherapy preoperatively, as well as hormonal therapy, and is free of symptoms, with no bleeding. Surgical treatment with a right extended hemicolectomy is programmed after the chemotherapy has been completed.

Endoscopy\_UCTN\_Code\_CCL\_1AD\_2AB

**Competing interests:** None

**D. C. Alves de Lima, L. R. Alberti**  
Biogastro Clinic, Rua Piauí,  
69 – Conj. 109/110., Belo Horizonte,  
Minas Gerais, Brazil

## References

- 1 *Tohfe M, Shami P, Aftimos G, Saade M.* Gastrointestinal metastases from breast cancer: a case report. *South Med J* 2003; 96: 624–625
- 2 *Law WL, Chu KW.* Scirrhous colonic metastasis from ductal carcinoma of the breast: report of a case. *Dis Colon Rectum* 2003; 46: 1424–1427
- 3 *Kilgore T, Grewal A, Bechtold M et al.* Breast cancer metastasis to the colon: a case report and review of the literature. *Internet J Gastroenterol* 2007; 6: 1–6
- 4 *Michalopoulos A, Papadopoulos V, Zatagias A et al.* Metastatic breast adenocarcinoma masquerading as colonic primary. Report of two cases. *Tech Coloproctol* 2004; 8 (Suppl 1): s135–137
- 5 *Kudo T, Matsumoto T, Nakamura S et al.* Solitary minute metastasis from breast cancer mimicking primary intramucosal gastric signet-cell cancer. *Gastrointest Endosc* 2005; 62: 139–140

## Bibliography

**DOI** 10.1055/s-0029-1215277

*Endoscopy* 2011; 43: E143–E144

© Georg Thieme Verlag KG Stuttgart · New York ·  
ISSN 0013-726X

## Corresponding author

**D. C. Alves de Lima, MD**

Biogastro Clinic

Rua Piauí, 69 – Conj. 109/110.

Belo Horizonte, MG 30150–320

Brazil

Fax: +55-31-32416668

david@biogastro.com.br