



## An Uncommon Cause of Diarrhea

Oliver Möschler<sup>1</sup>, Thomas Krüer<sup>2</sup> and Kerstin Schütte<sup>1\*</sup>

<sup>1</sup>Department of Internal Medicine and Gastroenterology, Niels-Stensen-Kliniken Marienhospital, Osnabrück, Germany

<sup>2</sup>Pathocom Institute for Pathology, Osnabrück, Germany

### Keywords

Cat scratch colon; Gastrointestinal metastases; Diarrhea

### Clinical Image

A 78-years-old female patient presented with diarrhea persistent for more than six weeks without weight-loss or hematochezia. No other symptoms were reported. She had a history of breast cancer that was curatively treated by surgery more than ten years ago and a history of low anterior resection for the treatment of rectal cancer more than 18 years ago. Postoperative complications had led to several surgical interventions at that time point that finally had led to a permanent descendostomy. She also had undergone ovariectomy for ovarian cancer in 1975. The family history was positive for breast cancer (mother, son).

Physical examination revealed no further significant findings. Initial laboratory investigations showed elevation of LDH with 343 U/l (normal up to 248 U/l) and CEA with 31.1 µg/l (normal up to 4 µg/l).

In colonoscopy, a polyp in the right sided colon was removed by EMR. While the mucosa in the descending colon was appearing normal, the mucosa in the ascending and transverse colon was highly vulnerable and showed several linear spontaneous mucosal breaks (Figure 1A), patchy suspected submucosal hemorrhage and convoluted small submucosal vessels (Figure 1B and 1C). An additional esophagogastroduodenoscopy (EGD) was performed to exclude diseases of the upper GI tract revealing patchy erythema in the antrum and corpus. Biopsies from all sections of the colon and from gastric mucosa were taken and sent for histologic examination.

Histopathology described normal epithelium but submucosal infiltration by a malignant PAS-positive non-small-cell tumor with a proliferation rate (MIB1) of more than 40% in the biopsies from ascending and descending colon. These findings were judged as infiltration by a poorly differentiated adenocarcinoma with signet-ring cell morphology (Figure 1E, HE x20).

Gastric biopsies also showed extensive submucosal infiltration by adenocarcinoma (Figure 1F, HE x20).

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#### \*Correspondence:

Kerstin Schütte, Department of Internal Medicine and Gastroenterology, Niels-Stensen-Kliniken Marienhospital Osnabrück, Bischofsstr. 1 49074 Osnabrück, Germany, Tel: 0049-541-3264102; Fax: 0049-541-3264105; E-mail: kerstin.schuette@mho.de

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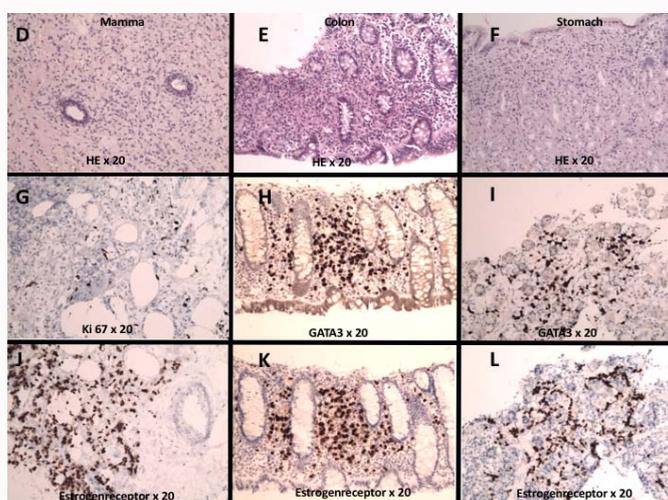


Figure 1: Colonoscopy and histopathology.

Subsequent search for the primary including but not limited to computed tomography of the abdomen and MRI of the pelvis did not reveal further intra-abdominal tumor manifestations. MRI of the breasts, however, showed a suspicious area in the lower inner quadrant of the left breast. In biopsies from this area, an estrogen receptor and progesterone receptor positive invasive lobular breast cancer with signet-ring morphology on histopathological examination was diagnosed (Figure 1D (HE x20), 1G (ki67 x20), 1J (estrogen receptor x20)).

Additional immunohistochemical staining on the colonic and gastric biopsies corroborated GATA3 (Figure 1H (colon x20) and 1I (stomach x20)) and estrogen receptor (Figure 1K (colon x20) and 1L (stomach x20)) positivity. Subsequently, palliative antihormonal systemic therapy was initiated.

## Discussion

Gastrointestinal metastases from breast cancer are rare affecting less than 0.7% of patients [1]. Cat scratch colon was first described in 2007 as bright red linear marks predominantly detected in the right sided colon [2] and interpreted as consequence of barotrauma during colonoscopy and more likely to occur when the elasticity of the mucosa has been altered due to any reason [3].

The occurrence of such lesions should always raise the suspicion of underlying colonic disease and lead to biopsy sampling. Underlying diseases in published reports so far predominantly comprise ischemic and collagenous colitis. This is the first case presenting a diffuse malignant condition associated with these exceptional macroscopic colonic changes.

## References

1. Ambroggi M, Mordenti P, Stroppa EM, Nobili E, Biasini C, Cavanna L. Gastrointestinal metastasis from breast cancer: Report of five patients from a retrospective analysis of 740 cases at a single institute and review of the literature. *J Clin Oncol.* 2011;29(15):e11529.
2. McDonnell WM, Loura F, Pointon MJ, Greenson JK. Cat scratch colon. *Endoscopy.* 2007;39(5):459-61.
3. Baudet JS, Diaz-Bethencourt D, Arguinarena X, Soler M, Morales S, Aviles J. Cat scratch colon is caused by barotrauma secondary to insufflation during colonoscopy. *Endoscopy.* 2008;40(10):878.