A 38-year-old female, non-smoker was referred to our outpatient clinic in 2011, with penetrating ileocolic CD diagnosed at 16 (A1L3B3, Montreal classification). At age 19, she underwent a total colectomy with ileo-rectal anastomosis in the referring institution, which was complicated with ileorectal anastomotic stricture and later development of enterocutaneous fistulous tract to umbilical area. She was on azathioprine since then, maintaining poor general condition and a high-output fistula, with intermittent bleeding. The patient was started on infliximab (5 mg/kg/8w) but twelve weeks after, she was hospitalized with abdominal pain and fever. Computed tomography scan disclosed a large mass involving a large enterocutaneous fistula. Microscopic analysis of ultrasonography-guided-biopsy specimen yielded the diagnosis of squamous cell carcinoma (SCC) (Fig. 1). In multidisciplinary team meeting, the patient was deemed not suitable for surgical resection, due to the tumor size and overall health status, and was referred to palliative care. She died three months later.

The authors describe a rare case of SCC involving a persistent enterocutaneous fistula, in a 22 year history of severe CD, under chronic immunosuppression with azathioprine. English literature concerning malignant transformation of enterocutaneous fistulas is limited to very few adenocarcinoma case reports, while no case of SCC is documented. To our

Figure 1 Axial abdominal computed tomography scan revealing a large mass involving a large enterocutaneous fistula (Panel A). Microscopic analysis of ultrasonography-guided-biopsy specimen [H&E stained intermediate power magnification] showing a neoplasm with a trabecular pattern, obvious signs of keratinization and a high number of apoptotic cells, consistent with the diagnosis of squamous cell carcinoma (Panel B).
knowledge, this is the first case of SCC in an enterocutaneous fistula associated with CD.

The development of carcinomas in chronic fistulas is rare, and considered a separate entity from the increased risk of colonic cancer in patients with CD.² The causative relationship between CD and carcinomatous transformation of fistulas is not fully understood, but may be related to delayed wound healing, constant mucosal regeneration and high cell turnover rates, or to immunosuppressive therapies used to treat CD. In fact, the chronic immunosuppression with azathioprine has been increasingly associated with a possible higher risk of malignancy in these patients.³,⁴ The outcome is poor following surgical treatment as the malignancy of chronic fistula in CD is usually belatedly diagnosed.⁵

We report this case to alert the potential for malignant degeneration of chronic unhealing enterocutaneous fistula in long-standing CD. It is believed that complaints of persistent pain and unhealing wounds in the absence of infection in patients with CD suggest the possibility of malignancy and biopsy is recommended. We highlight that physicians should be aware of the potential increased risk of cancer in patients under treatment with azathioprine.

Conflict of interest

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References


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