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# Eccrine Porocarcinoma presenting as an abdominal wall mass in a patient with ulcerative colitis—A rare case report

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ABSTRACT

*INTRODUCTION:* Eccrine porocarcinoma (EPC) is a rare malignancy of eccrine sweat glands. It is often seen during the sixth to eighth decades of life. We report the first case of eccrine porocarcinoma arising on the abdomen of a 21-year-old patient with ulcerative colitis.
*CASE PRESENTATION:* A 21-Year-old female presented to emergency department with a one month history of an enlarging mass over left lower abdomen. Abdominal examination revealed a slightly erythematous, nodular and non-mobile firm mass in left lower quadrant. There was superficial ulceration with slight serous discharge. CT scan of the abdomen and pelvis with contrast revealed a superficial cystic lesion over the anterior abdominal wall, provisionally diagnosed as sebaceous cyst. Incision and drainage were performed and on follow-up, no signs of healing were observed and the patient subsequently underwent surgical excision. Histopathological examination revealed an eccrine porocarcinoma.
*DISCUSSION:* EPC is a rare and aggressive tumor. It may occur de novo or as a result of malignant transformation of an eccrine poroma. A long period of clinical history is often encountered. It usually occurs on the lower extremities followed by the, trunk, head and neck, and upper extremities. The clinical picture usually consists of a painless nodule or papule. Treatment is wide local excision. No strong evidence exists for adjuvant therapy. The risk of local recurrence is about 20%.
*CONCLUSION:* High index of suspicion is required for diagnosis of EPC. Early diagnosis is achieved by histopathological examination and early definitive surgical excision leads to excellent results.


## 1. Introduction

Eccrine Porocarcinoma (EPC) is a rare and aggressive tumor with an incidence of 0.005% to 0.01% of all epithelial cutaneous tumors [1]. It carries high risk of local recurrence, regional lymph node invasion, and distant metastasis. It is often seen during the sixth to eighth decade of life, and most commonly affects the lower extremities [1]. To the best of our knowledge, this case represents the first report of EPC arising on the abdomen of a patient with ulcerative colitis (UC) and in the early 20′s.

## 2. Case presentation

A 21-Year-old African American female presented to the emergency department (ED) with a one month history of an enlarging mass over left lower abdomen. The mass was first noticed approximately one month prior to presentation. There was no history of pain, fever, malaise, nausea, vomiting, constipation, bloody diarrhoea, or abdominal distension. Past medical history included UC diagnosed nine months ago. Drug history included mesalamine and prednisolone. Menstrual, surgical and family history were non-contributory.

On examination, vital signs were normal. Abdominal examination revealed a non-distended, non-tender abdomen with a 3 cm × 2 cm × 2 cm, slightly erythematous, nodular, firm and non-mobile mass in left lower quadrant, with superficial ulceration and slight serous discharge. Laboratory investigations were non-contributory. Computed Tomography (CT) scan of the abdomen and pelvis with contrast revealed a 3.2 cm × 2.4 cm × 2.3 cm superficial cystic lesion over the anterior abdominal wall (Figs. 1 and 2). Upon chart review, we noticed the mass present on a CT obtained four months ago, howevr, was overlooked at the time. The patient was provisionally diagnosed with a questionable sebaceous cyst. Incision & drainage were performed yielding moderate serosanguinous exudate. The wound was left open to heal, and the patient was discharged on a course of antibiotics.

A week later on follow up, no signs of healing were evident and the patient complained of a continuously discharging wound. Consequently, she underwent surgical excision with primary wound closure. Histopathological examination of the excised tissue revealed a poroid neoplasm originating from the overlying

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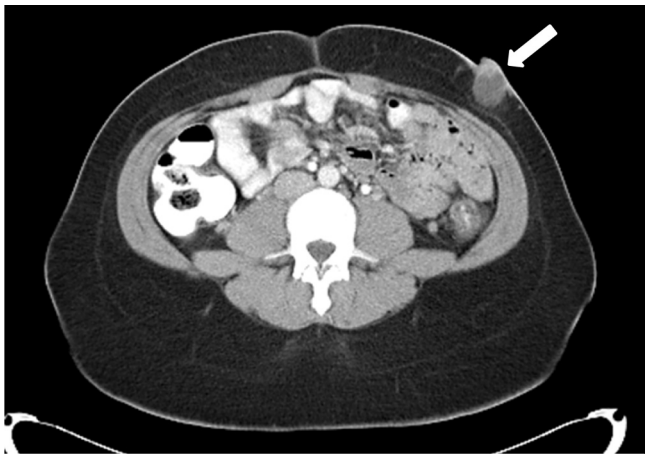

**Fig. 1.** CT scan of abdomen with contrast (axial view) showing an abdominal wall mass 3.2 cm x 2.4 cm x 2.3 cm (white arrow).

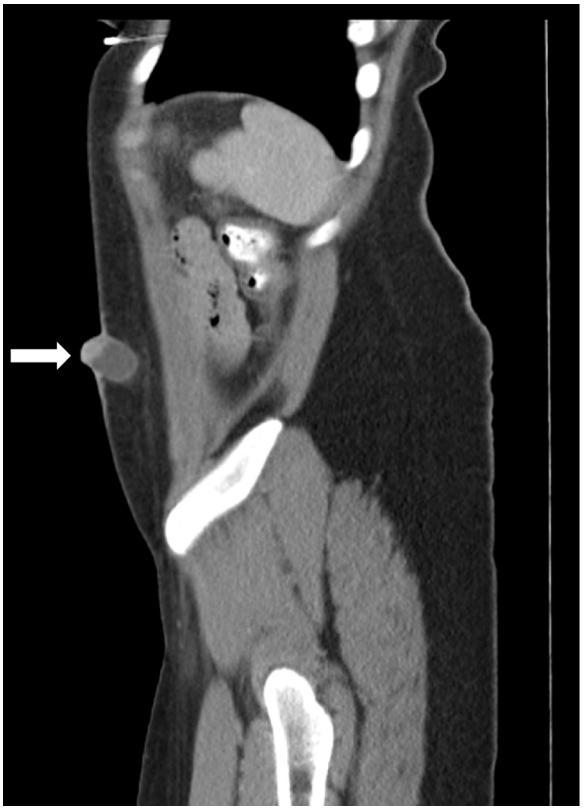

**Fig. 2.** CT scan of abdomen (sagittal view) showing anterior abdominal wall mass (white arrow).

epidermis and extending in lobules into the deep dermis to the level of the dermal-subcutaneous junction (Figs. 3–5). Immunohistochemical staining revealed tumor cells strongly positive for cytokeratin 7 and cytokeratin p63, with focal immunoreactivity for cytokeratin AE1/AE3 and epithelial membrane antigen (EMA). A final diagnosis of completely excised EPC with free but narrow margins was concluded. Follow-up CT scans of the chest, and abdomen & pelvis with contrast revealed no signs of metastasis. Two weeks later, the patient underwent surgical re-excision with primary wound closure to ensure wider safety margins, and was discharged the same day. Follow-up MRI of the abdomen was within normal. Histopathological examination results after re-excision revealed

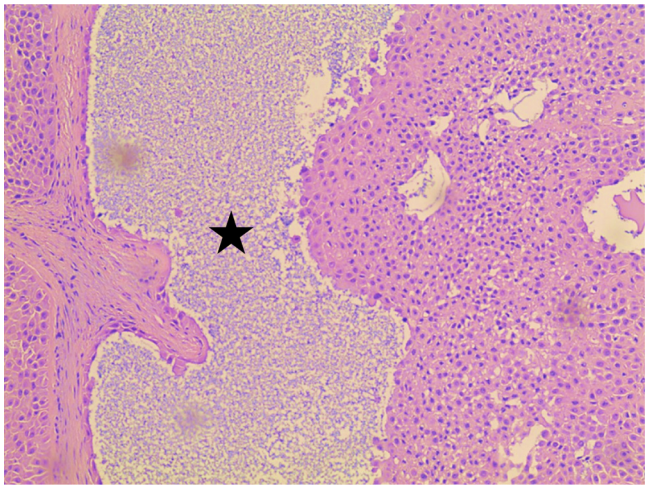

**Fig. 3.** Cystic space formation (black star) in eccrine porocarcinoma (100 × magnification, H&E stain).

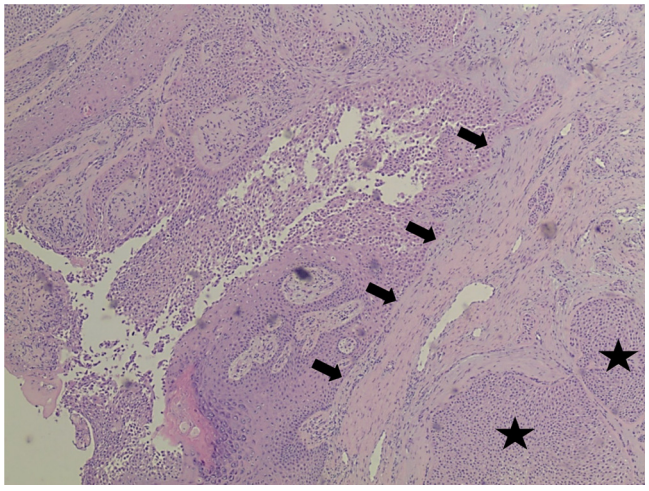

**Fig. 4.** Initial biopsy showing desmoplastic response (black arrows) and Islands of tumor cells (black stars) in eccrine porocarcinoma (40× magnification, H&E stain).

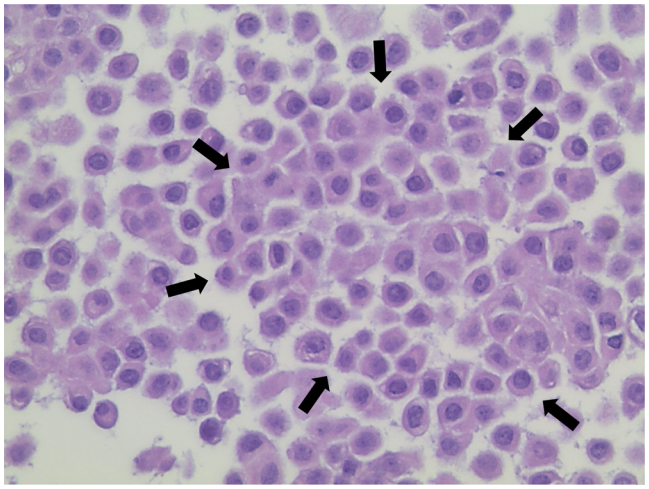

**Fig. 5.** Cohesive response of poroid cells in eccrine porocarcinoma (demarcated by black arrows, 400× magnification, H&E stain).