

## Case Report

# Eccrine porocarcinoma from the abdominal wall in an elderly female: a case report

Rajeswari Mani, Mohamed Javid\*, Shanthi Ponnandai Swaminathan, Kannan Ross

Department of General Surgery, Madras Medical College and Rajiv Gandhi Government General Hospital, Chennai, Tamil Nadu, India

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**\*Correspondence:**

Dr. Mohamed Javid,

E-mail: flyjavid@yahoo.in

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### ABSTRACT

Eccrine porocarcinoma (EPC) is a rare malignancy arising from the sweat gland. It is commonly seen in elderly female patients. There is no characteristic appearance for this malignancy and so making a clinical diagnosis is difficult. The diagnosis is confirmed by histopathological examination (HPE). Authors present a case of a 53-year-old female who presented with an ulceroproliferative lesion on the left side of the abdominal wall. After the lesion was radiologically ascertained to be localized and having a diagnosis of porocarcinoma from wedge biopsy, a wide local excision was done. The HPE confirmed the diagnosis of EPC.

**Keywords:** Eccrine porocarcinoma, Ulcer proliferative lesion abdominal wall, HPE

### INTRODUCTION

Eccrine porocarcinoma (EPC) was first reported by Pinkus and Mehregan in the year 1963 when they termed it as epidermotropic eccrine carcinoma.<sup>1</sup> Later in 1969 Mishima and Morioka introduced the term eccrine porocarcinoma.<sup>2</sup> The etiology of this tumor is not well understood. Though many suggest it to arise from a pre-existing eccrine poroma, others have the opinion that they can arise de novo following chronic light exposure, exposure to chemical agents and immunosuppression.<sup>3</sup> EPC is a perilous tumor as there is a high risk of recurrence, lymph node metastasis and metastasis to distant sites. Hence patients are advised to be under regular follow up.<sup>3,4</sup>

### CASE REPORT

A 53-year-old female presented to us with complaint of an ulcer over the left side of the abdominal wall for 8 months. On clinical examination, an ulcer proliferative lesion of size 5×4×1.5 cm was present over the left side

of abdominal wall near the flank. The lesion was not fixed to the underlying structures and there was no regional lymphadenopathy. Computed tomography (CT) of the abdomen revealed a 5.4×4.3×2 cm lesion arising from the abdominal wall and not involving the underlying structures. A wedge biopsy was done at it was reported as EPC. Subsequently, a wide local excision was done, and the margins were found to be negative on frozen section. So, a primary closure of the excised site was done.



**Figure 1: Ulcer proliferative lesion on the abdominal wall.**

The histopathological examination (HPE) of the excision biopsy was reported as irregularly proliferating elongated nests composed of small, round basaloid cells and epithelium. Also, the tumor nests contained central duct formation. Epithelial membrane antigen (EMA) was positive and carcinoembryonic antigen (CEA) was negative on immunohistochemical staining; these findings were suggestive of a diagnosis of eccrine porocarcinoma. The margins were confirmed to be free from the tumor and hence no further intervention was done.

## DISCUSSION

EPC is a rare tumor with an incidence of 0.005% to 0.01% among all epithelial cutaneous tumors.<sup>5</sup> It is commonly seen in elderly population during the sixth to eighth decade of life. It most commonly affects the lower limbs followed by the head and the trunk; and shows no gender predilection.<sup>4,5</sup>

The tumor has no specific appearance and hence is difficult to diagnose based on gross morphological appearance. It can be confused with squamous cell carcinoma, squamous cell carcinoma in situ (Bowen's disease), pyogenic granuloma, basal cell carcinoma, seborrheic keratosis, amelanotic melanoma, verruca vulgaris or metastatic adenocarcinoma.<sup>5-7</sup> The lesions can appear as nodules or infiltrated plaques with or without verrucous, erosive, ulcerative, or polypoid features. The lesion can vary from a few millimeters to 10 cm in size at the time of presentation.<sup>4</sup>

The diagnosis of the EPC can be confirmed only by a biopsy and HPE which shows either an invasive architectural pattern and/or cytological pleomorphism with eccrine differentiation.<sup>4</sup> The hallmark of diagnosis is the histological presence of ductal differentiation of poromatous epithelial cells. Confirmation of the diagnosis can be done immunohistochemical staining for CEA, EMA, and p53 protein due to simultaneous epidermoid differentiation.<sup>4,5,8</sup>

The main prognostic factor for EPC seems to be tumor thickness. There is a role of sentinel node biopsy in detecting micro-metastasis to regional lymph nodes.<sup>4</sup> Poor prognosis is seen in tumors that have more than 7 mms in thickness, have more than 14 mitoses per high power field and with lymph vascular space invasion. A mutation in the p53 tumor suppressor gene is suggested to be involved in the carcinogenesis of EPC. However, they can't be used in the diagnosis as it is also expressed in benign poroma.<sup>4</sup> The main stay of treatment for EPC is wide local excision with regional lymphadenectomy if the lymph nodes are involved. As the tumor has a high rate of recurrence, it is vital to achieve a tumor-free

margin during excision.<sup>6</sup> The role of chemotherapy and radiotherapy is not yet clearly proven in cases of metastatic EPC. Patients are advised to on regular follow up as there is an increased possibility of recurrence in these tumors.<sup>6</sup>

## CONCLUSION

EPC is a rare skin tumor that poses significant difficulty in clinical diagnosis due to the lack of specific etiological factor or specific morphological characteristics and hence a high index of suspicion is needed for an early diagnosis. Confirmation can only be done on HPE and due to the high possibility of recurrence, patients are advised to be on regular follow up.

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