



# A Case of Metastatic Eccrine Porocarcinoma: A Rare Case

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## ABSTRACT

Eccrine porocarcinoma (EPC) is a rare type of skin cancer arising from the intraepidermal portion of eccrine sweatglands or acrosyringium. It occurs more commonly in the lower extremities, followed by head, scalp, upper extremities, trunk and abdomen. It can arise de novo or from pre-existing eccrine poroma in 18% of cases. It occurs more commonly in elderly.

Cutaneous and visceral metastasis can occur which acts very aggressively. It represents 0.005-0.01% of all cutaneous tumors. This tumor must be considered as the differential diagnosis of long standing skin tumors in elderly with recent history of accelerated growth. We herein report a case of metastatic eccrine porocarcinoma in a 50 year old male in right axilla which is very rare presenting as verrucous lesion treated with wide local excision with complete lymphnode dissection.

**KEY WORDS:** Metastatic Eccrine Porocarcinoma , Wide Local Excision, Verrucous Lesion, Cutaneous Tumors.

## Introduction

Eccrine Porocarcinoma is a rare sweat gland tumour representing about 0.005% of epithelial neoplasms. The first reported case of eccrine porocarcinoma, was attributed to Pinkus and Mehregan in 1963 [1]. They described it as “epidermotropic eccrine carcinoma”. It was only a few years later, the term “eccrine porocarcinoma” was coined by Mishima and Morioka in 1969 [2]. About 20% of EPC will recur and about 20% will metastasize to regional lymph nodes. There is a mortality rate of 67% in patients with lymph node metastases.

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## Case Report

50 Yr old male, a resident of Chennai, belonging to low socio economic status was admitted with complaints of Swelling in the right axilla for the past 4 yrs, On examination irregular verrucous lesion of 5\*4 cm palpable in right axilla with hard mated multiple axillary lymph nodes felt below the lesion. Clinical suspicion was squamous cell carcinoma, so FNAC was done which shows malignant adnexal tumour. CECT Abdomen and CECT Chest shows no evidence of metastasis .Patient was treated with wide local excision and axillary lymphadenectomy. HPE documented as malignant eccrine porocarcinoma with all dissected axillary nodes positive for malignancy.

Immuno histochemical study with EMA showed diffuse membrane positivity and CEA showed focal positivity. A diagnosis of Eccrine porocarcinoma of the right axilla with

metastasis to axillary lymph nodes was given. Patient was given post-operative radiotherapy and was followed up for a period of 12 months and showed no features of loco-regional recurrence.

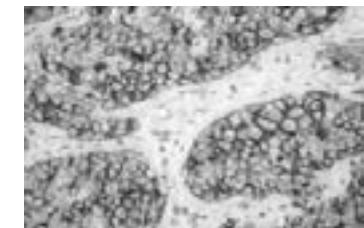
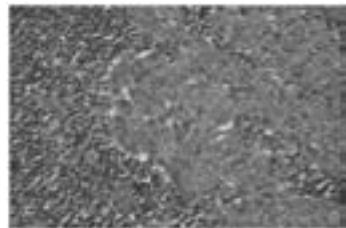
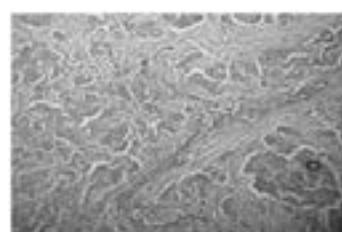
**Fig.No. 1 :** Shows verrucous lesion in right axilla



**Fig.No. 2 :** Gross picture showing resected specimen and axillary lymphnodes



**Fig.No.3:** Histological presentation of lymph nodes.



## Discussion

EPC is an infrequent cutaneous neoplasm arising from the cells of the acrosyringium with metastatic potential. This tumor may occur de novo or developing from a pre-existing lesion as degenerative progression, and it can manifest clinically as a solitary lesion with non characteristic macroscopic appearance, as an ulcerated nodule or as a plaque, polypoid, or verrucous lesion [3-14]. The most common location of EPC are the lower limbs, head and neck, trunk, vulva, breast, nail bed and upper extremities[15]. The histological diagnosis can be done on specific microscopic features. In the primary tumor, the malignant cells arise from the intraepidermal portion of the eccrine sweat glands and may be limited to the epidermis or may extend into the dermis. The tumor are asymmetric with cords and lobules of polygonal tumorcell, typically with a cribriform pattern. Nuclear atypia is evident, with frequent mitoses and necrosis. From the lymphatics, the tumor cells can invade the overlying epidermis because of the "epidermotropic" nature of the tumor cells (Pagetoid pattern) [16-18]. Immunohistochemical studies with positive staining using antibodies to various kinds of antigens (human CK, EMA, carcinoembryonic antigen, p53 protein and others) can be done

to confirm acrosyringeal differentiation and to support the conclusive diagnosis [9]. The differential diagnosis of EPC is extensive and runs the spectrum of basalcell carcinoma to metastatic adenocarcinoma [15]. Histologic findings predictive of the aggressive clinical course were the evidence of lymphovascular invasion, which is associated with multiple regional cutaneous metastases, the existence of more than 14 mitoses per field and a tumoral depth of more than 7 mm [5]. In our case, the tumor depth was 3.3 mm with mitotic activity of 14 mitoses per 10 high-power fields, and it showed lympho vascular invasion and Pagetoid intraepidermal extension. Both regional and distant metastases are attributed to the tumor's ability to invade the dermal lymphatics. Solid organ metastases are observed in 10% of cases, lymph nodes metastases in 20% of cases, and local recurrence in 20% of cases [5-15]. However the prognosis of this carcinoma seems difficult to establish due to missed follow-up of cases described in the literature and tumor rarity.

The optimum surgical treatment for EPC is wide surgical excision of the primary tumor with broad tumor margins, given the propensity for local recurrences, with curative rates from 70% to 80% of cases [14-18]. Therapeutic lymphadenectomy should be performed in case of lymphadenopathy, while the role of sentinel lymph node biopsy (SLNB) for staging EPC remains unknown, an probably may be reserved in cases of histological aggressiveness or intralymphatic permeation by the primary tumor [16-20].

Experiences with postoperative radiotherapy are also scarce. Its use is generally reserved for palliative care and tumor response is both partial and inconsistent[17-21]. No standard therapeutic protocols for metastatic EPC exist. However, a variety of chemotherapeutics have been used with varying degree of responsiveness.

## Conclusion

EPC is an unusual tumor to diagnose. The treatment for the metastatic disease has not been standardized. Early identification and complete excision gives the best chance of a cure. Neither chemotherapy nor radiation therapy has been proven to be of clinical benefit in treating metastatic disease.

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