Case Report

Eccrine Porocarcinoma with Metastasis at Rare Site

Sandeep Hade, Anand Asia, Shreya Maniyar, Amit Ambade

Department(s) and institution(s) Dermatology, GMC Akola, Maharashtra, India

ABSTRACT

Introduction: Eccrine porocarcinoma (EPC) is a rare type of skin cancer that develops from an intraepidermal portion of sweat glands. It is a rare tumor and is aggressive. It is rarely diagnosed, and therefore, there is no correct algorithm for its management. It is usually seen on extremities, in the head-and-neck region, and trunk but can occur anywhere. Timely diagnosis is needed to improve survival. **Case Report:** Here, we describe the rare case of porocarcinoma lesions seen on the right buttock and genitals in a 56-year-old female. We discuss the clinical presentation and the histopathological findings. **Conclusion:** EPC as a differential diagnosis should be included in all tumor lesions with nodules or masses at any site. The patient must be referred to an oncologist for timely diagnosis and management.

Key words: Aggressive, Eccrine porocarcinoma, Sweat glands

SUMMARY

Eccrine porocarcinoma (EPC) is a rare cancer arising from eccrine sweat glands or pre-existing poroma and has malignant potential. Various reports show that it can occur at any site besides usual sites such as extremities, head-and-neck region, and trunk. As it is rare and has varied clinical presentation, diagnosis is often challenging and misdiagnosis is likely. Hence, a timely correct diagnosis is required which can improve survival chances.

INTRODUCTION

Eccrine porocarcinoma (EPC) is a rare skin cancer that develops from an intraepidermal portion of sweat glands and is aggressive. It constitutes 0.01% of all cutaneous tumors.[1] However, 20% of these lesions may recur or metastasize to regional lymph nodes.[1-4] It is seen that 60% mortality occurs.[1-4] There is no correct algorithm for its management.[1-3]

We describe the case of porocarcinoma lesions seen on the right buttock with inguinal metastasis in a 56-year-old female which are new, unusual, and rare as no cases were described at this site till date to the best of our knowledge.

Access this article online	
Website: themmj.in	Quick Response Code
DOI: 10.15713/ins.mmj.83	

METHODS

Patient Information

Case history

A 56-year-old female patient resident of Akola came to the outpatient department with complaints of ulcerated itchy, painful lesions over the right buttock for 1 year. She had multiple raised lesions over her vagina and vulva for 6 months. The painful, raised lesion over the right buttock near the anal opening, gradually increased in size and ulcerated in the next 3 months after formation. Then, multiple skin colored

Address for correspondence:
Dr. Sandeep Hade, Shubham Park, Swapnapurti Phase 1, Sector 26, B! Building, Flat No. 13, 3rd Floor, Nigdi Pradikaran, Pimpri Chinchwad - 411 044, Maharashtra, India. E-mail: sandeephade9@gmail.com

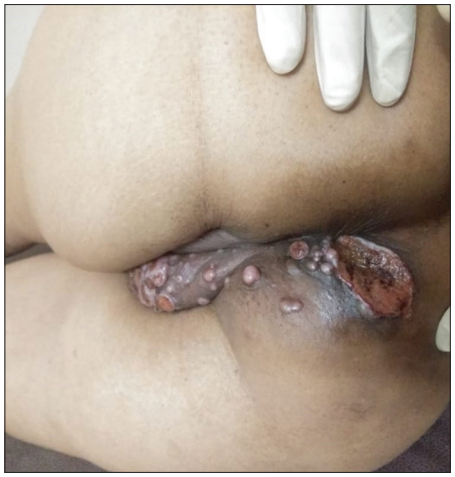

Figure 1: Lesions on buttock

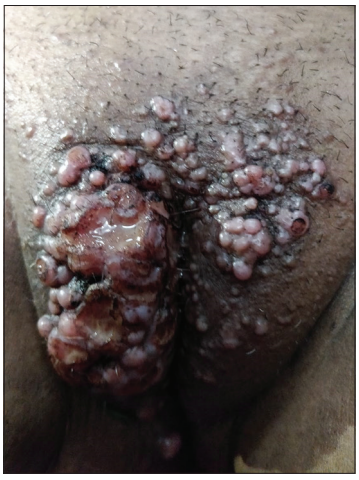

Figure 2: Lesions on the vulva

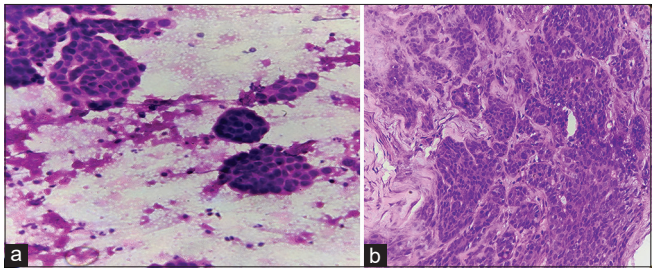

Figure 3: (a and b) On histological examination

to red raised lesions developed near the lesion over the buttock 6 months back and gradually similar lesions appeared over the genitals. The patient also had bilateral inguinal lymphadenopathy with hard, non-tender, non-matted lymph nodes. The patient's history was not contributory. There were no systemic abnormalities. All hematological and biochemical investigations were within normal limits.

Clinical Findings

Her per vaginal examination revealed nodularity over the lower one-third of the vagina on the right side with indurated vaginal mucosa and per rectal examination showed induration over the lower rectum on the right side.

The lesion was a single ulcerated non-tender plaque of size 6 × 5 cm with a raised indurated border and erythematous base over the perianal region on the right buttock. Multiple hypopigmented to erythematous papules and nodules extending from the right perianal region to the vulva. Lesions over the vulva were associated with erosion formation and oozing.

Diagnostic Assessment

Scrape cytology was suggestive of a malignant epithelial lesion (suggestive of adenocarcinoma). Fine needle aspiration cytology from the inguinal lymph node was suggestive of metastasis. Individual cells showed pleomorphism, increased nuclear-to-cytoplasmic ratio, and abnormal mitotic activity. Biopsy was done from papulonodular lesions over the vulva and ulcerated plaque over the perianal region. Histopathological examination was suggestive of syringoid eccrine carcinoma with extramammary Paget's disease. The radiological findings did not demonstrate metastases to the lung, pleura, or bone. Focal immunopositivity for pan-cytokeratin (AE1/AE3)/p40/CK15. Immunostain for vimentin/S100 protein/BerEP4: Negative. Thus, immunohistochemistry showed findings consistent with EPC.

A diagnosis of EPC was made.

Therapeutic Intervention

She was referred to an oncologist for further management.

Follow-up and Outcomes

Follow-up is needed.

DISCUSSION

EPC shows aggressive behavior compared to other forms of non-melanoma skin cancer.[3-5] The patient has

no clinical features but presents with solitary plaque or nodular lesion that can be erythematous and later may progress to painful ulceration.[2] The tumor is mainly seen in the elderly.[2] There is no difference in sex predisposition but in females, the lower extremities are the most commonly affected.[5] EPC has no clinical features and mimics other non-melanoma cancer therefore biopsy and histopathological examination is necessary that will reduce misdiagnoses.[6] Surgical resection with local excision and having free margins remains the primary mode of treatment of choice but there is no adequate evidence showing the use of adjuvant radiotherapy or chemotherapy although docetaxel and immunotherapy using pembrolizumab have been successfully used to prevent relapse.[4-7] Our case is a female patient with lesions seen on the right buttock along with the vulva. Very few EPC cases have been reported in the literature and it has been previously reported in intergluteal cleft and vulva in females but never on the right buttock.[7-10] Thus, tumors can occur anywhere. This is important to know as early and correct diagnosis can improve survival. We have referred the patient to an oncologist. Follow-up is required and this experience and knowledge will help in the future.

Limitations

Only one patient was studied. Therefore, future research is needed.

CONCLUSION

EPC as a differential diagnosis should be included in all tumor lesions with nodules or masses. The patient must be referred to an oncologist and the case confirmed using biopsy and histopathological examination for timely diagnosis and management as it may be fatal due to distant metastasis.

1. Patient perspective – Not available.
2. Informed consent – The patient gave informed consent.

REFERENCES

1. Kim HJ, Kim A, Moon KC, Seo SH, Kim IH, Kim A, *et al*. Eccrine porocarcinoma: A multicenter retrospective study with review of the literatures reported in Korea. Ann Dermatol 2020;32:223-9.
2. Salih AM, Kakamad FH, Baba HO, Salih RQ, Hawbash MR, Mohammed SH, *et al*. Porocarcinoma; Presentation and management, a meta-analysis of 453 cases. Ann Med Surg (Lond) 2017;20:74-9.
3. Scampa M, Merat R, Kalbermatten DF, Oranges CM. Head and neck porocarcinoma: SEER analysis of epidemiology and survival. J Clin Med 2022;11:2185.
4. Marone U, Caracò C, Anniciello AM, Di Monta G, Chiofalo MG, Di Cecilia ML, *et al*. Metastatic eccrine porocarcinoma: Report of a case and review of the literature. World J Surg Oncol 2011;9:32.
5. Robson A, Greene J, Ansari N, Kim B, Seed PT, McKee PH, *et al*. Eccrine porocarcinoma (malignant eccrine poroma): A clinicopathologic study of 69 cases. Am J Surg Pathol 2001;25:710-20.
6. Fernández-Ferreira R, Alvarado-Luna G, Motola-Kuba D, Mackinney-Novelo I, Cervera-Ceballos EE, Segura-Rivera R. Intergluteal cleft eccrine porocarcinoma with metastasis to inguinal region and lung: Case report and review of the literature. Case Rep Oncol 2020;13:1463-73.
7. Singh A, Nguyen L, Everest S, Vinogradov M. Metastatic porocarcinoma effectively managed by pembrolizumab. Cureus 2021;13:e20004.
8. Val-Bernal JF, Hermana S. Vulvar eccrine porocarcinoma: Report of a case and literature review. Rom J Morphol Embryol 2017;58:1611-6.
9. Fujimine-Sato A, Toyoshima M, Shigeta S, Toki A, Kuno T, Sato I, *et al*. Eccrine porocarcinoma of the vulva: A case report and review of the literature. J Med Case Rep 2016;10:319.
10. Adegboyega PA. Eccrine porocarcinoma of the vulva: A case report and review of literature. Int J Gynecol Pathol 2011;30:95-100.

How to cite: Hade S, AsiaA, Maniyar S, Ambade A. Eccrine Porocarcinoma with Metastasis at Rare Site. MIMER Med J 2022;6(2):50-52.

Source of Support: Nil. **Conflicts of Interest:** None declared.