

SKINimages

A Friable, Polypoid Tumor on the Chest

Catherine C. Motosko, MD¹, Gabriel Villada, MD², Fleta Bray, MD¹, Gregory Perez, MD^{1,3}

¹ Dr. Phillip Frost Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine, Miami, FL

² Department of Pathology, Miami VA Healthcare System, Miami, FL

³ Department of Dermatology, Miami VA Healthcare System, Miami, FL



A 90-year-old man with a history of BCCs and SCCs presented in clinic complaining of a tender, enlarging growth on his left upper chest that had been present and growing over 2–3 years. The lesion would bleed with minimal trauma or manipulation. On the left upper chest was a 6x8cm, tender, erythematous, exophytic, friable chest tumor without accompanying regional adenopathy.

Shave biopsy demonstrated dermal islands of atypical basaloid cells with pushing borders and central areas of necrosis *en*

masse. Numerous mitoses, including atypical forms, were observed. Focal squamous cell differentiation and clear cell changes were present. Lesional cells stained strongly positive for CAM5.2.

Porocarcinoma (malignant poroma) is a rare, high grade cutaneous adnexal malignancy of the sweat glands. While the exact incidence is unknown, it is thought to represent between 0.005–0.01% of cutaneous malignancies. Tumors tend to occur on the lower extremities, trunk, or head and neck of

March 2023 Volume 7 Issue 2

the elderly, presenting as verrucous plaques or polypoid growths, which may bleed with minor trauma.

Histopathologically the neoplasm consists of dermal nests and islands of basaloid cells with pushing or infiltrative borders. Cytologic features of malignancy can vary from moderate to marked and include cellular and nuclear polymorphism, hyperchromasia and atypical mitoses. Necrosis *en masse*, perineural and lymphovascular invasion are variably present. Ductal differentiation, or the presence of a precursor lesion (in-situ component, remnants of benign poroma), when present, facilitate the diagnosis of porocarcinoma. Additional patterns can be seen, including clear cell changes, squamous cell differentiation, sarcomatoid transformation, intratumoral melanin deposition or melanocytic colonization, and presence of other lines of adnexal differentiation.

Although porocarcinoma has no specific immunophenotypic profile, immunohistochemistry can assist in the diagnosis in several settings. If the tumor has prominent squamous cell differentiation, CK7, Cam5.2 or CEA highlight ductal differentiation, therefore supporting the diagnosis of porocarcinoma versus squamous cell carcinoma.¹ In the distinction between a primary adnexal tumor and adenocarcinoma metastatic to the skin, the former may express D2-40 and p63.² Finally, preliminary data suggest that a panel consisting of p16, p53, and Rb can help differentiate porocarcinoma from benign poroma.³

Treatment is typically with wide surgical excision, though Mohs micrographic surgery has been an effective way of achieving complete removal. There is a high rate of recurrence after resection, with potential for

metastasis to regional lymph nodes, and less commonly, internal organs. Excision prior to locoregional metastasis improves survival. Metastatic disease has proven resistant to currently available chemotherapies. The use of radiation therapies remains controversial.

CT of the chest, abdomen, and pelvis demonstrated tumor of the left upper chest extending from the epidermis into the subcutaneous fat, with no apparent involvement of the underlying muscle or of metastatic disease. The patient was treated with wide local resection. He has since been placed on niacinamide, acitretin, and vismodegib for prevention and treatment of SCCs and BCCs.

Conflict of Interest Disclosures: None

Funding: None

Corresponding Author:

Catherine C. Motosko, MD
University of Miami Miller School of Medicine
Dr. Phillip Frost Department of Dermatology and
Cutaneous Surgery
Email: catherine.motosko@gmail.com

References:

1. Mahalingam M, et al. An immunohistochemical comparison of cytokeratin 7, cytokeratin 15, cytokeratin 19, CAM 5.2, carcinoembryonic antigen, and nestin in differentiating porocarcinoma from squamous cell carcinoma. *Hum Pathol.* 2010;43:1265-1272.
2. Plaza JA, et al. Value of p63 and podoplanin (D2-40) immunoreactivity in the distinction between primary cutaneous tumors and adenocarcinomas metastatic to the skin: a clinicopathologic and immunohistochemical study of 79 cases. *J Cutan Pathol.* 2010;37:403-410.
3. Zahn J, et al. Altered Rb, p16, and p53 expression is specific for porocarcinoma relative to poroma. *J Cutan Pathol.* 2019;46:659-664.