**ABSTRACT**

Microcystic adnexal carcinoma is a rare adnexal neoplasm, with significant morbidity due to extensive subclinical extension, and an infrequent but demonstrated potential for regional as well as distant metastasis.

We present the case of a 58-year-old female with a seven-month history of a slowly enlarging growth on her chin. Punch biopsy was performed and the specimen identified as sclerosing sweat duct carcinoma, a histologic variant of microcystic adnexal carcinoma.

The tumor demonstrated perineural invasion, and primary excision by Mohs surgery produced a large final defect requiring complex reconstruction. The patient was subsequently found to have multiple lymph node metastases with extracapsular extension and lymphovascular invasion. She underwent a modified neck dissection and completed a course of adjuvant chemoradiation.

This case highlights the insidious nature of microcystic adnexal carcinoma, which warrants a high index of suspicion in any patient presenting with a solitary sclerotic facial plaque.

**HISTORY OF PRESENT ILLNESS**

A 58-year-old Caucasian female presented with a seven-month history of a slowly enlarging growth on her chin. She first observed this lesion in photos of herself as a shiny, reflective area of skin. She denied any associated pain, numbness, or tingling.

Past medical history significant for allergic rhinitis, eczema, hypertension, nephrolithiasis, cholelithiasis, and gastroesophageal reflex disease. Surgical history was non-contributory.

Family history significant for cancer deaths in maternal grandmother (rectal), mother (uterine), and pancreatic (maternal uncle).

The patient is retired from 20 years of military service, and married with two children. She admitted to social alcohol use, and denies tobacco or recreational drug use.

Current medications include dexlansoprazole, montelukast, and cetirizine. She is allergic to penicillins.

**PATHOLOGY**

A 3-mm punch biopsy was performed, which demonstrated a dermal tumor composed of deeply infiltrative aggregates of basaloid epithelial cells with ductal differentiation. The proliferation was highlighted by EMA and CK7, while failing to stain with CEA or BerEP4.

The clinical differential diagnosis included morphea or other localized scleroderma, morpheaform basal cell carcinoma, infiltrative basal cell carcinoma, desmoplastic squamous cell carcinoma, and microcystic adnexal carcinoma.

**PHYSICAL EXAMINATION**

Physical examination revealed an ill-defined, erythematous, waxy, indurated, sclerotic plaque without significant epidermal changes on the right inferior medial lower cutaneous lip, measuring 1.8 by 1.0 cm in diameter.

**MANAGEMENT & CLINICAL COURSE**

The patient was referred for primary resection by Mohs surgery, with plan for reconstructive repair to follow. The tumor was cleared in four stages and exhibited perineural invasion. The resulting defect ultimately required more complex reconstruction than originally anticipated; this was performed by a head and neck oncologic surgeon.

The patient was subsequently referred to an oncologist for further staging and consideration of adjuvant therapy. Staging PET/CT revealed two fluorodeoxyglucose-avid deep cervical lymph nodes in the right neck on staging PET scan. Excisional biopsies of both nodes were positive for adenocarcinoma.

A right modified neck dissection was performed, which demonstrated five additional lymph nodes positive for poorly differentiated metastatic carcinoma, favor adenocarcinoma, many with extracapsular extension and lymphovascular invasion. The patient completed a course of chemoradiation, with electron beam radiation therapy of 63 Gy in 35 fractions to the tumor bed and neck bilaterally and concomitant chemotherapy with weekly carboplatin and paclitaxel.

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The diagnosis was thus established of sclerosing sweat duct carcinoma. This entity is synonymous with microcystic adnexal carcinoma (MAC) from a clinical perspective. The distinction, where recognized, is purely histologic: sclerosing sweat duct carcinoma consists of monophasic sweat duct-like structures, whereas MAC demonstrates a biphasic pattern of ductal and pilar differentiation with superficial follicular keratinization.

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She recovered well from these interventions, but was lost to follow up three months later after moving cross-country to be with her husband.

**REFERENCES**


