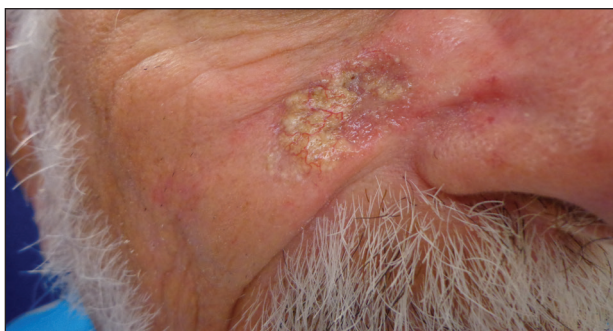


New Plaques Arising at Site of Previously Excised Basal Cell Carcinoma

Seena Tabibi, MD; Emily Lenczowski, MD; Rebecca J. Larson, MD



A 79-year-old man presented to dermatology with an enlarging bump on the right cheek. He reported a history of basal cell carcinoma on the medial right cheek that was removed 15 years prior with a resultant scar. Over the last 6 months, the area became more red and bumpy, and the lesion increased in size but was otherwise asymptomatic. The patient reported no history of other dermatologic conditions or skin cancer aside from the prior basal cell carcinoma. His medical history was notable for hypertension and hyperlipidemia. He had a history of smoking for many years (only recently quit) with extensive sun exposure in his lifetime as an outdoor worker. Physical examination revealed a 2.8×1.6-cm, pink, telangiectatic, and slightly depressed plaque, with the surface consisting of multiple white to yellowish coalescing papules. As part of the dermatologic workup, 4-mm punch and shave biopsies were obtained.

WHAT'S THE DIAGNOSIS?

- actinic comedonal plaque
- amyloidosis
- chondrodermatitis nodularis chronica helioides
- recurrent neoplasm
- xanthoma

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Drs. Tabibi and Larson are from the Southern Illinois University School of Medicine, Springfield. Dr. Larson is from the Division of Dermatology. Dr. Lenczowski is from Stritch School of Medicine at Loyola University, Chicago, Illinois.

The authors report no conflict of interest.

Correspondence: Rebecca J. Larson, MD, Division of Dermatology, Southern Illinois University School of Medicine, 751 N Rutledge St, PO Box 19644, Springfield, IL 62794 (rlarson@siu.edu).

THE DIAGNOSIS: Actinic Comedonal Plaque

Histopathologic examination showed multiple small, keratin-filled cystic spaces in the superficial dermis lined by stratified squamous epithelium that keratinized with a granular layer with surrounding solar elastosis (Figure 1). These findings were consistent with an actinic comedonal plaque (ACP), a rare variant of Favre-Racouchot syndrome (FRS). Due to other cases of invasive squamous cell carcinomas developing within these lesions¹ and the patient's history of basal cell carcinoma in the area, it was important to rule out malignancy and further confirm the diagnosis. Thus, an additional biopsy was obtained, which revealed no sign of cellular atypia. The patient was bothered by the appearance and

texture of the lesion, so he elected to pursue treatment. Because of the lesion's moderate size and location, surgical excision was not recommended. He was treated with cryosurgery followed by tretinoin gel 0.025% for 3 months (Figure 2). At 1-year follow-up, there was no recurrence and an acceptable cosmetic outcome.

Actinic comedonal plaques are characterized by cysts, comedones, and papules that form well-defined yellow plaques on the skin after chronic sun exposure.² First described in 1980 by Eastern and Martin,³ these lesions are most often found on the neck, thorax, nasal dorsum, helix, and forearms; they often are mistaken for basal cell carcinomas, chondrodermatitis nodularis chronica helicis, and amyloidosis.^{2,4}

Similar to the cases described by Eastern and Martin,³ our patient presented with a solitary 2.8×1.6-cm yellowish and bumpy plaque that was growing on chronically sun-exposed skin of the medial right cheek. The patient's history of smoking and basal cell carcinoma removal led to the following differential diagnoses: recurrent malignancy, tumors of dermal appendages, and xanthelasma-like deposition within a scar, among others.

Histologic examination demonstrated keratin-filled cystic spaces in the superficial dermis, along with hyperkeratosis and solar elastosis. These findings were consistent with the original histologic descriptions of ACP that were cited as a rare ectopic form of FRS.⁵ Leeuwis-Fedorovich et al¹ described multifocal squamous cell carcinomas arising in a FRS lesion in 2 cases. Additional biopsy was performed in our patient to rule out this possibility.

Aside from its role in dermatologic malignancy, exposure to UV light can lead to dilation of the sebaceous gland infundibulum and formation of comedones in various locations.² Histologically, lesions of ACP feature dilated, keratin-filled follicles within a matrix of

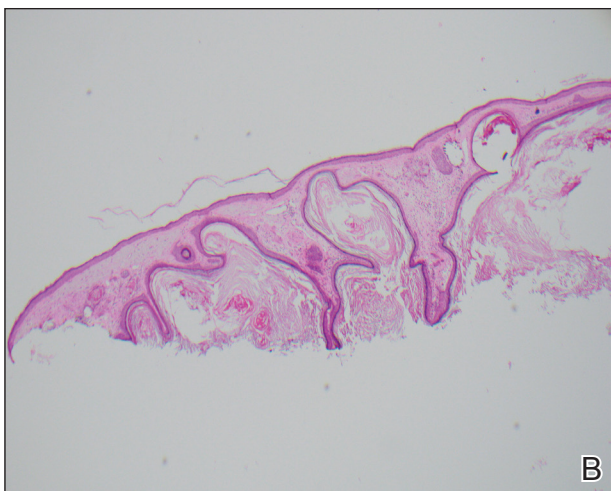
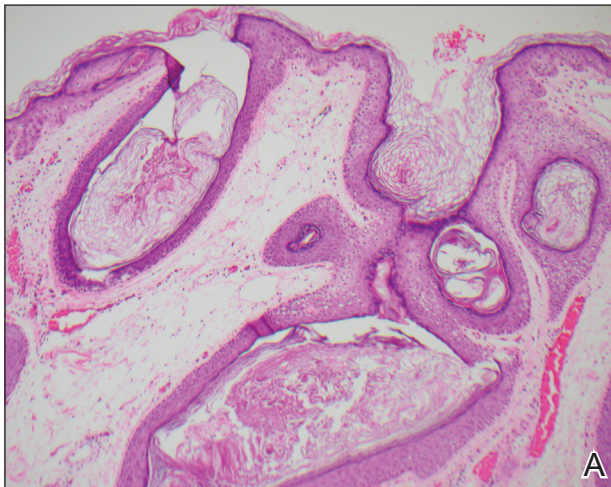


FIGURE 1. A and B, Multiple small, keratin-filled cystic spaces within the superficial dermis lined by stratified squamous epithelium that keratinized with a granular layer with surrounding solar elastosis (H&E, original magnifications ×100 and ×40).



FIGURE 2. The area was treated with cryosurgery followed by tretinoin gel 0.025% for 3 months.

amorphous damaged collagen in the middle and lower dermis, along with elastosis and basophilic degeneration with fragmentation of collagen bundles in the upper dermis coated with flattened epidermis.^{2,3}

Several clinical diagnoses were considered in the differential for our patient. In contrast to our patient's solitary lesion, classic FRS—nodular elastosis with cysts and comedones—is characterized by a diffuse yellowish hue of large open black comedones that are symmetrically distributed on the temporal and periorbital areas.⁶

Xanthoma has several clinical presentations. Plane xanthomas typically develop in skin folds, especially in palmar creases, while xanthelasma typically consists of yellow soft plaques on the eyelids and periorbital skin. Histologically, xanthomas contain lipid-laden macrophages, which were absent in our patient.⁷

Cutaneous amyloidosis can be characterized as macular, papular, and nodular. Nodular, the rarest subtype, commonly manifests on the face.⁸ However, its characteristic histologic features include atrophic epidermal changes with an amorphous, eosinophilic-appearing dermis due to amyloid deposition. These findings were absent in our case.

Recurrent neoplasm would be in the differential diagnosis of any solitary nodule arising within a previously treated site of malignancy, which was excluded by histologic examination of our patient.⁷

Topical tretinoin has been demonstrated as effective treatment of both FRS and ACP.^{2,9} Other effective treatment modalities include cryotherapy and

photoprotection.⁹ For our patient, a combination of cryosurgery and topical tretinoin resulted in depression of the plaque and a good cosmetic outcome.

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