## Periorbital and Tragal Cutaneous Lesions

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A 91-year-old White man with no personal or family history of skin cancer presented to the dermatology clinic for a total-body skin examination. A 6 $\times$ 5-cm grouped cluster of open comedones in the periorbital region and on the left tragus as well as surrounding actinic damaged skin with coarse rhytides, dyschromia, and lentigines were seen. He had a history of excessive UV exposure and noted that the lesions had been present for approximately 10 years. They were asymptomatic and remained unchanged since their onset.

## WHAT'S YOUR DIAGNOSIS?

- a. actinic granuloma
- b. basal cell carcinoma
- c. chloracne
- d. erosive pustular dermatosis
- e. Favre-Racouchot syndrome

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The opinions and assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the US Navy, US Army, US Department of Defense, or the US government.

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## THE **DIAGNOSIS:** Favre-Racouchot Syndrome

avre-Racouchot syndrome, also known as nodular elastosis with cysts and comedones, is seen in approximately 6% of adults aged 40 to 60 years and predominantly is observed in White males.<sup>1</sup> Typically, patients have a history of prolonged recreational or occupational UV exposure and tobacco use.

The diagnosis can be made clinically; no biopsy is necessary. If a biopsy is performed, histologic findings typically consist of notable actinic elastosis, epidermal atrophy, and comedones. The differential diagnosis includes acne comedones, colloid milium, milia, chloracne, and trichoepithelioma.<sup>2</sup> Associated conditions that have been found concurrently include cutis rhomboidalis nuchae, actinic keratosis, erosive pustular dermatosis, actinic granuloma, and basal and squamous cell carcinomas.<sup>2</sup>

The pathogenesis, while not fully understood, seems to involve a combination of chronic UV radiation exposure and heavy cigarette smoking that eventually leads to cutaneous atrophy and keratinization of the pilosebaceous follicles as well as the formation of comedones.<sup>2</sup> Radiation therapy also has been implicated as a possible causative agent of Favre-Racouchot syndrome.<sup>1</sup> Clinically, symmetric distribution of large black comedones over the temporal and periorbital areas is seen surrounded by distinct signs of UV-damaged skin, including wrinkles and atrophic skin.<sup>3</sup> Although there seems to be a synergistic effect between cigarette smoking and chronic UV exposure, evidence favors smoking as the major cause of this condition,<sup>4,5</sup> which causes striking visual changes but is a benign process.

UV protection and smoking cessation are the most important factors for prevention and limiting progression.

Treatment consists of typical comedonal therapies such as tretinoin or comedone extraction. Procedural options in conjunction with medical therapy include dermabrasion or laser therapy. Newer studies have shown promising results for both  $CO_2$  laser treatment and plasma exeresis.<sup>6</sup> Plasma exeresis is a noninvasive technique that causes ionization of atmospheric gas between the device and tissue, ultimately causing sublimation of the target tissue.<sup>7</sup> It is important to carefully evaluate and follow up with these patients due to their history of extensive UV exposure. Both short-term and long-term follow-up is recommended due to high rates of reoccurrence within 10 to 12 months and the dangers of chronic UV exposure–related malignancies.<sup>6</sup>

## REFERENCES

- Lewis KG, Bercovitch L, Dill SW, et al. Acquired disorders of elastic tissue: part i. increased elastic tissue and solar elastotic syndromes. J Am Acad Dermatol. 2004;51:1-21; quiz 22-24. doi:10.1016/j.jaad.2004.03.013
- Patterson WM, Fox MD, Schwartz RA. Favre-Racouchot disease. Int J Dermatol. 2004;43:167-169. doi:10.1111/j.1365-4632.2004.01546.x
- Sonthalia S, Arora R, Chhabra N, et al. Favre-Racouchot syndrome. *Indian Dermatol Online J.* 2014;5(suppl 2):S128-S129. doi:10.4103/2229-5178.146192
- Keough GC, Laws RA, Elston DM. Favre-Racouchot syndrome: a case for smokers' comedones. *Arch Dermatol.* 1997;133:796-797. doi:10.1001/archderm.133.6.796
- Muto H, Takizawa Y. Dioxins in cigarette smoke. Arch Environ Health. 1989;44:171-174. doi:10.1080/00039896.1989.9935882
- Paganelli A, Mandel VD, Kaleci S, et al. Favre-Racouchot disease: systematic review and possible therapeutic strategies. J Eur Acad Dermatol Venereol. 2018;33:32-41. doi:10.1111/jdv.15184
- Rossi E, Paganelli A, Mandel VD, et al. Plasma exeresis treatment for epidermoid cysts: a minimal scarring technique. *Dermatol Surg.* 2018;44:1509-1515. doi:10.1097/dss.000000000001604