Asymptomatic Lower Lip Hyperpigmentation From Laugier-Hunziker Syndrome

Payman Kosari, MD; Kristen M. Kelly, MD

Laugier-Hunziker syndrome is a rare mucocutaneous pigmentary disorder. It is considered benign, but other mucocutaneous pigmentation disorders are in the differential diagnosis and should be ruled out. This report describes a woman with pigmentation of the labial mucosa of the lower lip who was successfully treated with a Q-switched 532-nm laser.

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Case Report

A healthy 62-year-old white woman was referred to our clinic for treatment of multiple asymptomatic hyperpigmented lesions of the lower lip of 30 years' duration. All prior laboratory results were within reference range and colonoscopy in 1992 was negative. The lesions had never been biopsied. She had prior laser treatment to her lower lip with improvement but experienced subsequent recurrence of the lesions. The patient could not recall the type of laser used. She denied any relevant medical history and her family history was noncontributory.

Examination of the lower lip revealed well-demarcated, brown-black pigmented macules along the labial mucosa (Figure, A). Similar lesions were appreciated in the oral mucosa and further examination revealed periungual hyperpigmentation of the left index finger. The rest of the examination was unremarkable and no additional areas of hyperpigmentation were observed. It was determined that she would benefit from Q-switched 532-nm laser treatment to her lower lip.

Dr. Kosari is from Wake Forest Baptist Health, Winston-Salem, North Carolina. Dr. Kelly is from the University of California, Irvine.

The authors report no conflict of interest.

Correspondence: Kristen M. Kelly, MD, Department of Dermatology, University of California, Irvine, Beckman Laser Institute, 1002 Health Sciences Rd, Irvine, CA 92617 (kmkelly@uci.edu).

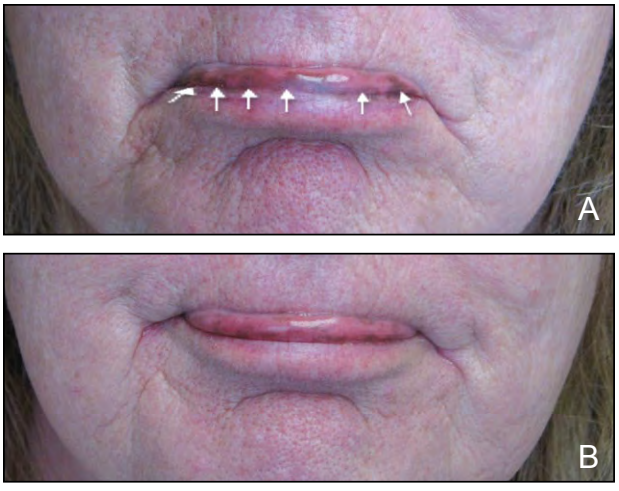
The patient had a history of herpes labialis infection, and prior to laser treatment, our patient was prophylactically placed on acyclovir 400 mg 3 times daily. We used a Q-switched 532-nm laser with the following parameters: 3-mm spot size, 1.0-J/cm^2 radiant exposure, delivered at a rate of 5 Hz. No anesthesia was used prior to laser treatment. Aloe vera gel and a cold pack were applied immediately after irradiation. The patient was educated on postoperative care and a follow-up 1 week later demonstrated near complete clearance of her pigmentation. She experienced minimal inflammation of her lower lip and completed her 14-day course of acyclovir without a herpetic outbreak.

There was some recurrence of pigment involving the lower lip at the 3-month follow-up (Figure, B). However, the patient was pleased with the results and decided against further treatment.

Comment

Laugier-Hunziker syndrome is a benign acquired mucocutaneous pigmentary disorder first described in 1970.[1] Onset of the disorder occurs in early to mid adult life with an average age of 50 years. Most cases are reported in Europe with the highest incidence occurring in white females.[2] According to a PubMed search of articles indexed for MEDLINE using the terms *Laugier-Hunziker syndrome* and *Laugier Hunziker syndrome*, 3 cases have been reported in the United States.[3-5]

Characteristically, lesions appear as well-defined, slate to brown-black, lenticular or linear macules that can be solitary or confluent.[6] In order of decreasing frequency, pigmentation of the buccal mucosa and lips, longitudinal melanonychia, pigmented macules around the nails, dark palmoplantar spots, and interdigital lesions have been reported.[7] Genital mucosa may be involved.[8] Although the etiology is unknown, the condition is asymptomatic with no systemic findings and prognosis is excellent.



Mucocutaneous pigmentary lesions of Laugier-Hunziker syndrome (arrows) before (A) and 3 months after Q-switched 532-nm laser treatment (B). (The white spot in the before photograph was created by the camera flash.)

Laugier-Hunziker syndrome is a diagnosis of exclusion. The differential diagnosis includes Addison disease, Peutz-Jeghers syndrome, systemic lupus erythematosus, McCune-Albright syndrome, drug-induced pigmentation, smoking, physiologic (racial) pigmentation, metals (poisoning), and postinflammatory hyperpigmentation.[6]

Few cases in the literature have been reported on treatment options for the lesions of Laugier-Hunziker syndrome. As the condition is benign, many cases are untreated and patients seek medical attention only for cosmetic reasons. Our patient had her wedding scheduled in 4 weeks and wanted to be treated before the event.

Treatment modalities utilized in the past, with varying success, include the Q-switched 532-nm laser, Q-switched alexandrite laser, and cryosurgery.[9-12] The former two utilize wavelengths absorbed by melanosomes to selectively injure pigment-containing cells without causing damage to surrounding tissues, while the latter takes advantage of melanocytes' sensitivity to cold.[13,14]

We treated our patient with a Q-switched 532-nm laser with a wavelength of 532 nm, spot size of 3 mm, and a radiant exposure of 1.0 J/cm^2. She had near complete clearance of pigmentation of the lower lip with a single laser treatment. She experienced minimal inflammation and no postinflammatory pigmentation. Our patient initially noted some repigmentation 6 weeks after laser therapy. At 3 months, pigmentation was improved from baseline and the patient was pleased.

Other causes of oral hyperpigmentation should be ruled out before making a diagnosis of Laugier-Hunziker syndrome. If treatment is desired, a Q-switched 532-nm laser can be used successfully with excellent results and minimal side effects. Patients should be advised of proper sun protection after therapy and informed that recurrence may occur.

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