Periorbital Myxedema

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Financial Disclosures: None reported.

Support: None reported.

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Submitted
June 12, 2016;
final revision received
July 13, 2016;
accepted
July 18, 2016.

71-year-old woman with a history of hypothyroidism presented to the emergency department with dyspnea. Physical examination revealed massive lower eyelid edema bilaterally (image) and dry, flaky skin on her lower extremities. Vital signs were normal. Further investigation revealed that the patient had been noncompliant with her prescribed levothyroxine for more than a year. The results of biochemical tests revealed a thyroid-stimulating hormone level of 220 mIU/L and a free thyroxine level of 0.15 µg/dL. The patient was admitted to the hospital, where a 0.1-mg intravenous dose of levothyroxine was administered daily for 3 days.

Myxedema, a clinical condition associated with hypothyroidism, refers to thickened, nonpitting edematous changes to soft tissues due to deposition of mucopolysaccharides in the dermis.¹ Periorbital myxedema is present in 70% to 85% of



patients with hypothyroidism, and 90% of patients with periorbital myxedema have hypothyroidism.^{2,3} Untreated, hypothyroidism can lead to myxedema coma—a rare, life-threatening condition. Management of myxedema varies depending on the severity of a patient's hypothyroidism.³ (doi:10.7556/jaoa.2016.148)

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Keywords: hypothyroidism, myxedema, periorbital myxedema