


A Unilateral Orbital Mass
Orbital fat herniation frequently presents as a prominent unilateral mass near the lateral canthus of the eye, where it poses a fundamental question: benign or malignant? As dermatologists, we will encounter this seldom-described benign mass. The differential diagnosis, pathophysiology, and treatment options are discussed in the context of a patient case.

Report of a Case | A nonobese man in his 80s with a history of 10 nonmelanoma skin cancers was seen in the dermatology clinic for an annual skin examination. Examination revealed a 1-cm yellow, glistening nodule at the superotemporal quadrant of the left eye. The nodule was most prominent when the patient turned the gaze of the involved eye medially (Figure). The patient had been aware of the asymptomatic mass for approximately 1 year. It did not interfere with his vision. There was no history of infection, trauma, or surgery to the orbit or adjacent skin. Examination of the right eye did not reveal a similar finding.

Discussion | Orbital fat herniation is a rarely described benign condition with a well-delineated pathophysiology. From the optic nerve to corneal limbus, a thin elastic membrane envelops the globe and is called a Tenon capsule. This capsule is surrounded by orbital fat, filling the orbital socket where it stabilizes globe motion.1 Orbital fat can, however, herniate through an acquired weakening in the Tenon capsule into the anterior portion of the eye.

Acquired weakness in the Tenon capsule has been associated with aging, trauma, and infection.2-3 A few small case series have shown that it is more common in older men.3,4 In a report of 12 patients with orbital fat herniation, the average patient age was 57 years (range, 3.5-82 years); 75% were men; and 58% of herniations were unilateral.2 It has also been suggested to be associated with obesity, although there are limited supporting published data.2

Clinically, orbital fat herniation presents, as it did in this case, as a yellow, soft, convex mass with superficial blood vessels. It most commonly occurs in the superotemporal quadrant of the orbit, but it can also occur in the superonasal and inferior quadrants.2 Biopsy and imaging are usually not necessary given its distinct clinical appearance.

Orbital fat herniation may be clinically misdiagnosed as dermolipoma or orbital lymphoma.4 A dermolipoma is a benign congenital lesion arising from an embryonic derivation of fat. It usually presents at a young age with a white-pink to yellow, concave, indurated mass that may contain fine hairs.5 Orbital lymphoma presents as a salmon-colored, firm, immobile mass.

The orbital fat herniation can be best appreciated when the patient turns the gaze of the involved eye medially.

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Conflict of Interest Disclosures: None reported.


