

Fat Pedicle Isolation During Transconjunctival Lower Blepharoplasty with Fat Repositioning: “The Inverse Shoe Shine Sign”

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One of the potential serious complications of fat repositioning lower blepharoplasty is diplopia resulting from restrictive strabismus (Goldberg 2000; Massry 2010). The ocular/orbital motility system is complex with numerous interconnections between the globe, intraocular muscles, orbital fat, and connective tissue elements. As this procedure isolates eyelid/orbital fat flaps for redraping, it was suggested in the early description of the technique to perform forced duction testing at the conclusion of surgery on all patients to assure the absence of tethering of globe movement (Goldberg 2000). As only two cases of post-operative restrictive diplopia have been reported (Goldberg and Ho 2002), it is possible that this concern is overstated. It is also possible that there are a number of cases which have gone unreported. In either case, the possibility of ocular restriction does exist and all that can be done to prevent it is prudent.

The inverse shoe shine sign (Massry 2012) is the free movement of the nasal and central eyelid fat pads below the inferior oblique muscle (IOM) when the fat pads are grasped and pulled sequentially in opposite directions (Fig. 67.1). It is pos-

sible because the lower eyelid/orbital fat pads are a continuous curtain of fat separated and restricted only by the IOM (nasal and central fat pads), the arcuate ligament (central and temporal fat pad), and any connective tissue bands between fat and other orbital structures. The maneuver simulates shining a shoe in an inverted fashion, with the muscle being the shoe and the fat the cloth (Fig. 67.1). It assures that there are no native fat pad connections to the IOM, deeper fat, and adjacent structures (caruncle, orbital rim, etc.).

This sign is especially important in transconjunctival surgery as the surgical field and view is

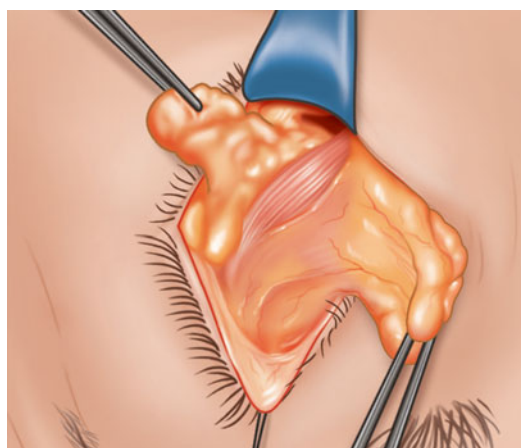


Fig. 67.1 The nasal and central fat pedicles are isolated and pulled in opposite directions under the IOM. Their free movement under the IOM resembles shining a shoe in reverse (fat is cloth and IOM is the shoe). I call this the “inverse shoe shine sign”

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limited. It is performed by isolating the nasal and central fat pad and forming pedicles by lysing all connective tissue bands at their base with sharp (scissors or cutting cautery) and blunt dissection (Q-tip). The fat dissection should not proceed closer than 2 mm from the fat muscle junction as to avoid inadvertent injury to the IOM. With some experience, the technique is easy to master.

The author has used this maneuver in over 350 procedures and has abandoned routine forced duction testing at the conclusion of surgery.

References

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