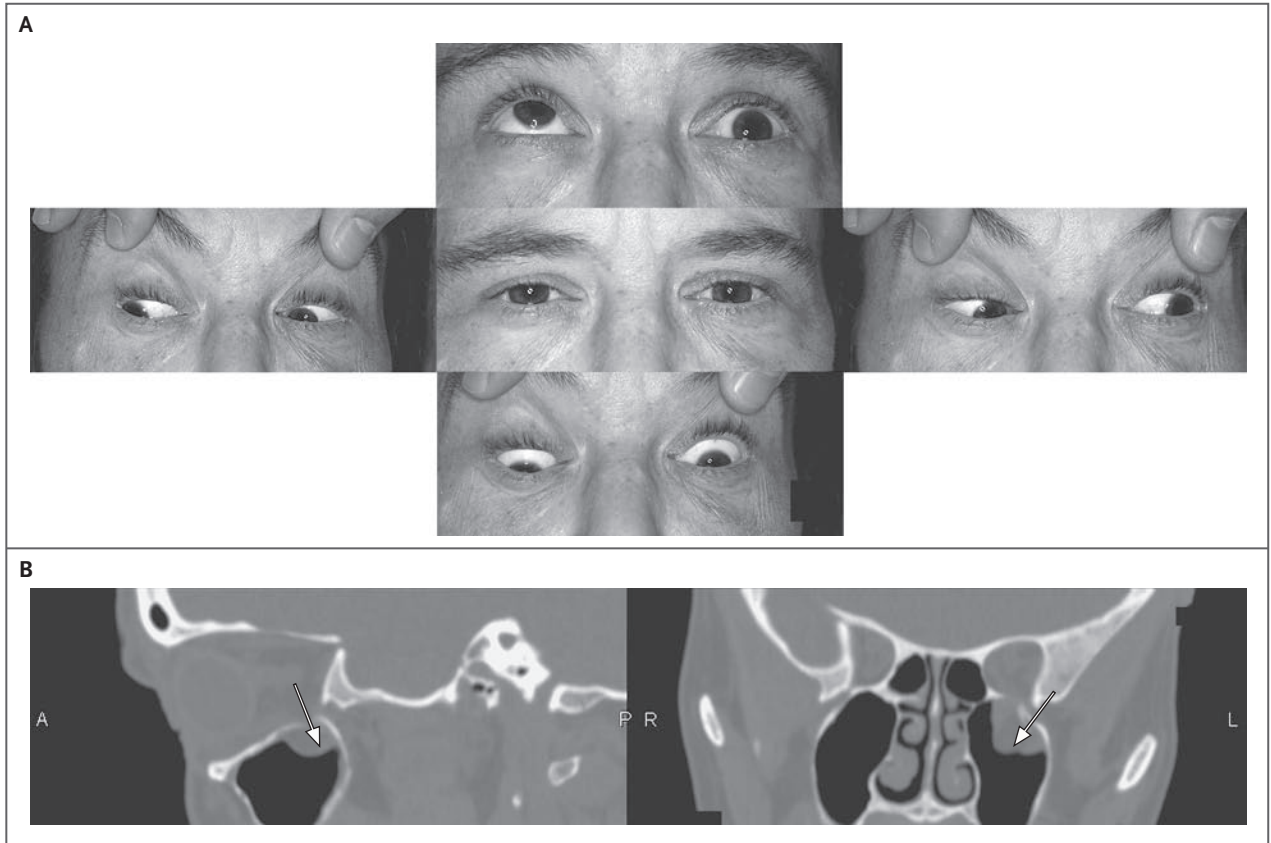


IMAGES IN CLINICAL MEDICINE

Monocular Paralysis of Vertical Ductions
after Facial Trauma

A 44-YEAR-OLD WOMAN PRESENTED WITH PAINFUL DIPLOPIA WHILE LOOKING up or down after being struck in the left eye with a bare fist. She had no proptosis or ptosis, and her afferent visual system and pupils were normal. She had orthophoria (normal muscular balance) in primary gaze but could not look up or down with her left eye (Panel A). Entrapment of the inferior rectus muscle was the presumed cause of up-gaze limitation, and direct trauma to the muscle the cause of down-gaze palsy. Forced ductions were positive up and negative down, supporting this explanation. Computed tomography without the administration of contrast material revealed a blowout trapdoor fracture of the left orbital floor with herniation of orbital contents into the maxillary sinus (Panel B, arrows, in sagittal view at left and coronal view at right). Magnetic resonance imaging confirmed entrapment of the left inferior rectus muscle. Surgical release of the herniated orbital tissue and closure of the orbital-floor defect restored normal ocular mobility.

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