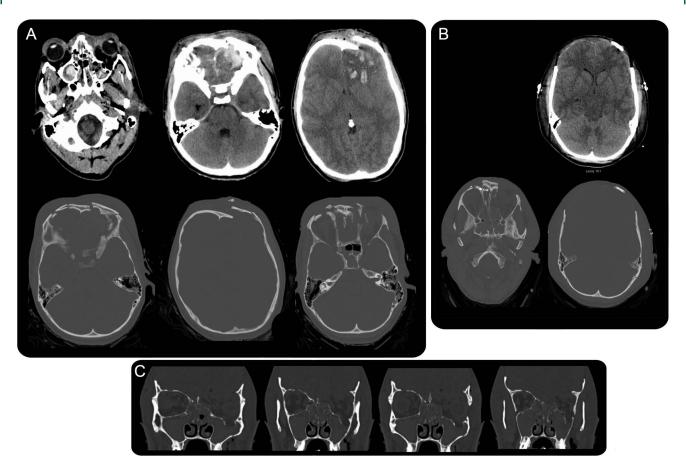
Ocular pulsations due to posttraumatic compromise of the orbital roof

Figure Craniofacial fractures and subsequent craniectomy



(A) Bifrontal hemorrhage with comminuted, complex fractures of the skull base, facial, and frontal bones. (B) After injury, the patient underwent a bifrontal craniectomy. Normally, titanium mesh is placed at an orbital roof fracture. Here, no mesh was used because no bone remained to anchor it (C).

A 21-year-old man was in a motor collision, resulting in skull fractures and subsequent craniectomy (figure). When he was able to communicate, 60 days after injury, he reported vertical oscillopsia and a throbbing sensation around his left eye. Examination revealed monocular left orbital pulsations (video on the *Neurology*[®] Web site at Neurology.org). Orbital pulsations can result from a cavernous carotid fistula, orbital venous varix, orbital arteriovenous malformation, orbital tumor, intraorbital ophthalmic artery aneurysm, tricuspid regurgitation, or orbital wall defects associated with neurofibromatosis. Orbital pulsations have been rarely reported due to incompetent orbital bone structure. This case illustrates orbital pulsations associated with postsurgical, posttraumatic oscillopsia.

Supplemental data at Neurology.org

John H. Pula, MD, Jorge C. Kattah, MD

From NorthShore University Health System (J.H.P.), Glenview, IL; and the University of Illinois College of Medicine in Peoria (J.C.K.).

Study funding: No targeted funding reported.

Disclosures: The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures. Correspondence to Dr. Pula: JPula@NorthShore.org



Ocular pulsations due to posttraumatic compromise of the orbital roof

John H. Pula and Jorge C. Kattah *Neurology* 2014;83;771 DOI 10.1212/WNL.000000000000000706

This information is current as of August 18, 2014

Updated Information & including high resolution figures, can be found at:

Services http://n.neurology.org/content/83/8/771.full

Supplementary Material Supplementary material can be found at:

706.DC1

Subspecialty Collections This article, along with others on similar topics, appears in the

following collection(s):

Orbit

http://n.neurology.org/cgi/collection/orbit

Oscillopsia

http://n.neurology.org/cgi/collection/oscillopsia

Permissions & Licensing Information about reproducing this article in parts (figures, tables) or in

its entirety can be found online at:

http://www.neurology.org/about/about_the_journal#permissions

Reprints Information about ordering reprints can be found online:

http://n.neurology.org/subscribers/advertise

Neurology ® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2014 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.

