Tullio phenomenon in superior semicircular canal dehiscence syndrome

Figure Left superior semicircular canal dehiscence

Temporal bone CT reformatted in the Poschl plane shows dehiscence of bone over the left superior semicircular canal. Arrow points to the area of dehiscence.

Tullio phenomenon refers to eye movements induced by sound.¹ This unusual examination finding may be seen in superior semicircular canal dehiscence (SSCD) syndrome.² This disorder is due to absent bone over the superior semicircular canal (figure). Patients complain of dizziness triggered by loud sound, aural fullness, autophony, and pulsatile tinnitus. When Tullio phenomenon exists in SSCD syndrome, the patient develops a mixed vertical-torsional nystagmus in which the slow phase rotates up and away from the affected ear (video on the *Neurology*[®] Web site at Neurology.org). This pattern of nystagmus aligns in the plane of the dehiscence of the semicircular canal and is due to excitation of its afferent nerves.

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