

Right superior semicircular canal dehiscence

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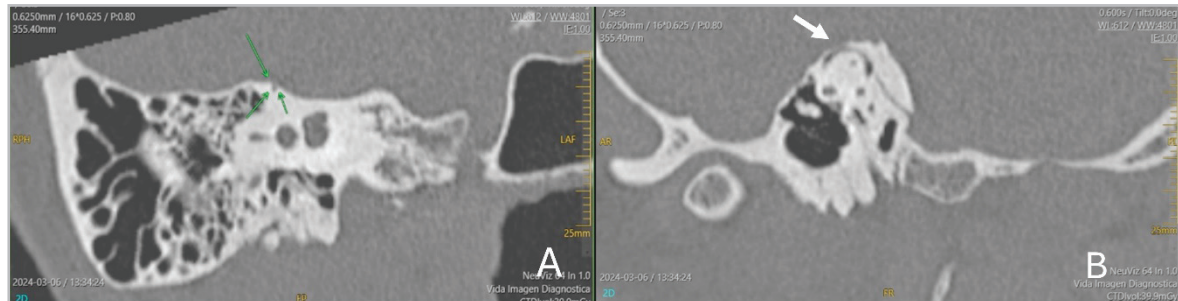


Figure 1. A: a computed tomography coronary section showing superior semicircular canal dehiscence in the right ear (green arrows). B: The white arrow shows superior canal dehiscence toward the right middle cranial fossa in a 45-year-old female with symptoms of vertigo and oscillopsia when coughing or sneezing, as well as the Tullio phenomenon.

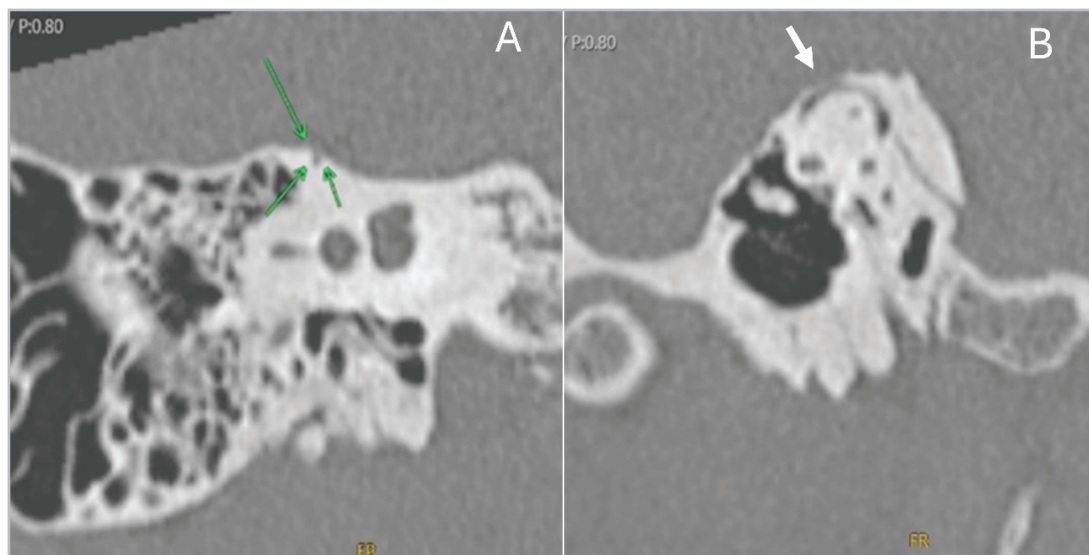


Figure 2. Close-ups.

Superior semicircular canal dehiscence (SSCD) syndrome was described by Minor in 1998. The middle fossa and superior semicircular canal have an abnormal connection in patients with SSCD, resulting in abnormal vestibular function, along with sensitivity to bone-conducted sounds and changes in intracranial pressure. Symptoms include autophonia, conductive hearing loss of the inner ear, Hennebert's sign (pressure on the external auditory canal), and sound-induced episodic vertigo and disequilibrium (Tullio phenomenon). The etiology of this condition is related to

developmental disorders, chronic otitis media with cholesteatoma, fibrous dysplasia and a high-riding jugular bulb (1).

Thinly collimated (0.5 to 0.6 mm) multisection computed tomography (CT) directed at the superior canal plane is recommended to diagnose this condition (2). The treatment for auditory and vestibular symptoms includes surgical repair or closure of the bony dehiscence through a craniotomy (3). Superior semicircular canal dehiscence should only be surgically treated in patients with clinical signs and symptoms.

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