



IMAGE ARTICLE

Bilateral Isolated Lateral Semicircular Canals Aplasia: MRI Findings

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A 38-year-old man was admitted to our department due to recurrent sensations of imbalance and vertigo for two years. Moderate bilateral sensorineural hearing loss was detected. Magnetic resonance imaging demonstrated bilateral isolated aplasia of the lateral semicircular canals (Figure 1). Bilateral superior and

posterior semicircular canals were normal. No cochlear malformation and no pathological contrast enhancement were detected. The internal auditory canal and the cerebellopontine angle were normal.

Lateral semicircular canal aplasia is a malformation of the inner ear, generally associated with vestibular and cochlear malformations [1]. However, isolated anomalies of the vestibular part of the inner ear are described very rarely [2]. Although the morphological abnormali-

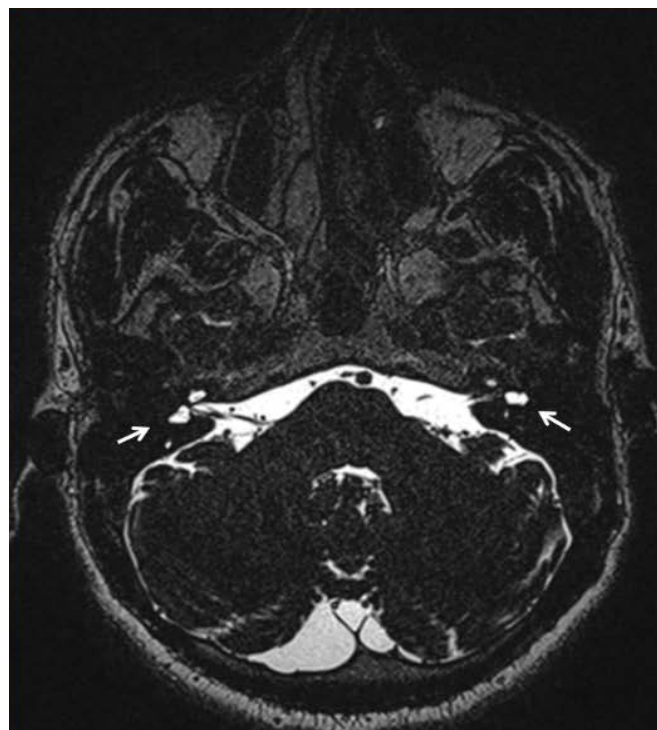


Figure 1: Axial CISS image shows bilateral isolated aplasia of the lateral semicircular canals (white arrows).

ties appeared to be isolated on imaging, patients can be present with functional signs of global cochlear, semicircular canal and otolithic lesions [3]. Functional investigations should be performed in the presence of isolated semicircular canal aplasia, even when it is an incidental finding, to exclude more extensive labyrinthine lesions.

Source(s) of Support

None.

Conflicting Interest

None.

References

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