Pneumolabyrinth: A Rare Cause of Vertigo after Minor Ear Trauma

Pneumolabirinto: Uma Causa Rara de Vertigem após Traumatismo Ligeiro do Ouvido

Andreia Bilé, Mariana Eiras Dias, Rita Belo Morais
Acta Med Port 2021 (AOP) • https://doi.org/10.20344/amp.16010

Keywords: Fistula; Labyrinth Diseases; Vertigo
Palavras-chave: Doenças do Labirinto; Fistula; Vertigem

Pneumolabyrinth is diagnosed by the presence of air inside the inner ear. We report the case of a healthy 9-year-old girl who developed dizziness and vomiting after inserting a hairpin in her itching ear. On examination she presented signs of left vestibulopathy (right-beating nystagmus on head shaking test and refixation saccade on head impulse test to the left) and evidence of trauma to the eardrum on otoscopy, without perforation. Pure tone audiometry did not show cochlear lesion. The temporal bone computed tomography revealed air in the left vestibule (Figs 1, 2).

She did antibiotic prophylaxis and three days of systemic corticosteroids. Vertigo subsided after one week with normalization of the vestibular examination and absence of signs of perilymphatic fistula. The case is remarkable because pneumolabyrinth is rare, particularly without temporal bone fracture, and it is usually the result of major trauma. It is important that the clinician considers this diagnosis when evaluating a patient with vertigo, even after minor trauma to the ear canal.

ACKNOWLEDGMENT
The authors would like to thank Dr João Pimentel, Otorhinolaryngologist, for helpful comments of the manuscript.

AUTHORS CONTRIBUTION
All the authors contributed equally to the draft of the article and literature review.

PROTECTION OF HUMANS AND ANIMALS
The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY
The authors declare having followed the protocols in use at their working center regarding patients’ data publication.
INFORMED CONSENT
Obtained.

CONFLICTS OF INTEREST
All authors report no conflict of interest.

FUNDING SOURCES
The authors declare that there were no external sources of study for the performance of this article.

REFERENCES