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#### IMAGES IN OTORHINOLARYNGOLOGY

# Tympanic blast injury

## Barotraumatismo timpánico

### Olga Lasso-Luis\* and Javier Chacón-Martínez

Servicio de Otorrinolaringología, Hospital Virgen de la Salud, Toledo, Spain

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We report a case of tympanic barotrauma with its otoscopic evolution recorded in photographs. A sharp increase in air pressure in the external auditory canal (EAC) caused by an impact with a flat surface (hand, ball, etc) can cause injury to the tympanic membrane, ossicular displacement, and affect the labyrinth through its openings.

Patient of 52 years of age, with a history of dyslipidemia and hypertension, attends otolaryngology consultation, 8 days after being hit by a ball on the right ear. Since then, he presents hearing loss and isolateral tinnitus. Does not refer otalgia, otorrhagia or loss of balance.



Figure 1 Image after trauma.



Figure 2 Peview after 1 month.

E-mail address: mlasso@eresmas.com (O. Lasso-Luis).

<sup>\*</sup>Corresponding author.

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Figure 3 Peview after 2 months.

On otoscopic examination, we appreciate a small anterior perforation, without otorrhea, with edges

that cannot be placed in consultation; a subsequent hemorrhagic bullae in the EAC, adjacent to the tympanic frame, and bloody fluid in the chamber (Figure 1). Audiometry is performed in which isolateral hearing loss is manifested. It was decided to keep the patient under observation, with precautions about entry of water or manipulation of the EAC.

In the review alter one month, we appreciated a new epidermal formation covering the perforation, upward displacement of the blebs and the persistence of bleeding in the tympanum (Figure 2).

Three months later, the patient was asymptomatic. In the canal, the blebs and epithelialization membrane are moved outward, leaving a complete eardrum (Figure 3). The perforation has closed spontaneously, as is the case with most small traumatic injuries.

#### Conflict of interests

The authors have indicated there is no conflict of interests.