

Estudio número 2

Prevención del barotrauma ótico en la aviación: Una revisión sistemática.

Artículo publicado en la revista *Otology & Neurotology*. Revisión sistemática y metaanálisis realizado en la Universidad de Sydney, Australia.

El objetivo fue revisar la bibliografía y buscar publicaciones relevantes relacionadas con la prevención del barotrauma ótico en la aviación. En particular, esta revisión buscó identificar procedimientos, técnicas, dispositivos y medicamentos para la prevención del barotrauma ótico, así como evaluar la evidencia relacionada con su eficacia.

Llama la atención la falta de evidencia publicada sobre un problema significativo y cada vez más común en la otología.

Actualmente existe evidencia de nivel 1 que respalda la eficacia de la pseudoefedrina oral (120 mg) en la prevención del barotrauma ótico en adultos. Sin embargo, la pseudoefedrina oral (1 mg/kg) no parece ser efectiva en niños.

No existen datos para apoyar la eficacia del inflado del balón nasal o de los tapones para los oídos que igualan la presión para prevenir el barotrauma ótico.

Una novedosa técnica, recientemente publicada, para la colocación de tubos de drenaje transtimpánicos transitorios es prometedora, pero requiere una evaluación adicional.

Prevention of otic barotrauma in aviation: A systematic review.

Objective: To conduct a systematic review of the published evidence relating to the prevention of otic barotrauma in aviation. In particular, this review sought to identify procedures, techniques, devices, and medications for the prevention of otic barotrauma as well as evaluate the evidence relating to their efficacy.

Data sources: Ten databases including Embase, MEDLINE, the Cochrane Database of Systematic Reviews, and the Cochrane Central Register of Controlled Trials were searched using the full historical range.

Study selection: English language articles including more than or equal to five participants or cases were included. Outcomes of interest were reduced severity or the successful prevention of otic barotrauma in participants undergoing gradual changes in pressure during air travel or its simulation.

Data extraction: Articles and data were extracted and analyzed according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses and other international guidelines.

Conclusions: This review highlights the lack of published evidence relating to what is a significant and increasingly common problem in otology. There is level 1 evidence that supports the efficacy of oral pseudoephedrine (120mg) in preventing otic barotrauma in adults. However, oral pseudoephedrine (1mg/kg) does not appear to be effective in children. There is insufficient evidence to support the efficacy of either nasal balloon inflation or pressure-equalizing ear plugs for the prevention of otic barotrauma. A recently reported, novel technique for insertion of temporary tympanostomy tubes is promising but requires further evaluation.

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