

## Estudio número 7

### Mastoidectomía cerrada con obliteración de la mastoides y el epítimpano en la cirugía del colesteatoma adquirido

Origen: Hospital terciario en Amsterdam, Holanda. Publicado en Laryngoscope

El objetivo de este estudio retrospectivo de cohortes fue analizar los resultados y la tasa de recurrencias en la mastoidectomía cerrada con obliteración del epítimpano y la mastoides como tratamiento para el colesteatoma.

La obliteración se realizó con un colgajo del periostio temporal más paté de hueso, fragmentos de cartílago o hidroxapatita. El seguimiento fue realizado con microotoscopia y resonancia magnética de difusión.

Se presentan 99 oídos, correspondientes a 96 pacientes, operados entre los años 2010 y 2014. La tasa de recurrencias y de enfermedad residual fue del 7,1%. Los autores las comparan con las cifras obtenidas antes de empezar a realizar la obliteración (24,4% y 39,7%, respectivamente).

La estrategia de disminuir el tamaño de la cavidad donde potencialmente pueda desarrollarse el colesteatoma, junto con la utilización de la resonancia magnética de difusión, permite realizar la técnica de la mastoidectomía cerrada con mayor seguridad, que era el principal inconveniente que se le solía atribuir a esta técnica, que permite preservar la anatomía del oído, y en particular la del conducto auditivo externo, con respecto a su estado anatómico previo a la cirugía.

#### Canal wall up surgery with mastoid and epitympanic obliteration in acquired cholesteatoma.

**Objectives/hypothesis:** The objective of this study was to evaluate surgical outcome and residual and recurrence rates of canal wall up (CWU) surgery with obliteration of the mastoid and epitympanum.

**Study design:** Retrospective cohort study in a tertiary referral center.

**Methods:** Patients with (sequelae of) acquired cholesteatoma treated with primary or revision CWU surgery with obliteration of the epitympanum and mastoid were identified retrospectively from 2010 to 2014. Obliteration was performed with cartilage chips or a periosteal midtemporal flap in combination with bone pâté and/or hydroxyapatite. Patients were followed up with micro-otoscopy and magnetic resonance imaging (MRI) with diffusion-weighted imaging (DWI).

**Results:** Ninety-nine ears in 96 patients were managed with obliteration of the epitympanum and mastoid following CWU surgery. Mean postoperative follow-up was 39.6 (standard deviation [SD] = 16.3). Mean follow-up until the last MRI-DWI was 29.7 months (SD = 16.0). In total, 74 ears in 72 adult patients (mean age = 46.8 years) were operated and 25 ears in 24 pediatric patients (mean age = 12.8 years). The overall recurrence rate

was 7.1%, and the residual rate was 7.1%. In comparison, before the introduction of obliteration, the residual rate in our clinic was 24.4% and the recurrence rate 39.7%. After CWU surgery with obliteration, recurrence in pediatric patients (16.0%) was more frequent than in adults (4.1%). Although this difference was not statistically significant, a trend was observed ( $P = .066$ ).

**Conclusions:** Obliteration of the epitympanum and mastoid is a reliable and safe technique following CWU surgery for cholesteatoma, resulting in low residual and recurrence rates.

**Level of evidence:** 4 Laryngoscope, 2018.

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**Keywords:** Cholesteatoma; canal wall up; hearing outcome; mastoid surgery; obliteration; recurrence; residual disease

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Department of Otorhinolaryngology, Academic Medical Center, Amsterdam, the Netherlands.

Hellingman, C.A.; Geerse, S.; de Wolf, M.J.F.; Ebbens, F.A.; van Spronsen, E.