Abstract

Introduction: In the surgical management of cholesteatoma, one can opt for a closed technique (simple mastoidectomy) or open surgery (radical mastoidectomy). Open mastoidectomy with reconstruction of the posterior wall and the middle ear in a single surgery combines the advantages of both techniques, namely, adequate surgical exposure, eradication of cholesteatoma, and anatomical reconstruction of the middle ear structures. Objective: To evaluate the surgical results in the management of cholesteatoma through the technique of open mastoidectomy with reconstruction of the posterior wall and the middle ear in a single surgery. Methods: Prospective analytical observational study conducted between 2009 and 2012 with patients undergoing this surgical technique in the Hospital Universitario del Valle [University Hospital of Valle], performing preoperative clinical monitoring and quarterly postoperative tomography with previous assessments of hearing and pre- and postoperative audiometry. Results: Forty-five patients were studied. Mean postoperative follow-up was 28 months. Surgical success was achieved in 93.3% of patients, as measured by clinical and radiological follow-up. Hearing preservation was found after reconstruction of the hearing mechanism, based on measured audiometry, i.e., pure-tone average (PTA), using the statistical test for paired samples between preoperative and postoperative PTA. (95%CI -1.47- 12.15). Residual cholesteatoma was present in 6.6% of cases; three to four times lower than the rate reported in the literature. Conclusions: This type of surgery can be considered a successful technique in the treatment of cholesteatoma in selected cases.

Keywords

Keywords, Cholesteatoma, ossiculoplasty, canal-wall-down mastoidectomy (CWD), canal-wall-up mastoidectomy (CWU), reconstruction mastoidectomy, COG.