Cholesteatoma is a pathologic condition of the middle ear characterized by the presence of squamous epithelium in the interior of the temporal bone, with erosive and destructive capacity. The potential for serious central nervous system complications, the difficult surgical approach and the high recurrence rate conserve this pathology as a challenging one.

RESULTS

In order to review medico-surgical procedures and good clinical practices, we aimed to analyze tympanomastoidectomy success rate, to establish eventual predictive factors for failure, and to evaluate the computed tomography (CT) scan's value in the study of cholesteatoma.

METHODS AND MATERIALS

We performed a retrospective cohort study concerning all patients submitted to tympanomastoidectomy for cholesteatoma at the Otolaryngology department of our hospital, from January 1st, 2005 to December 31st, 2009. Clinical and demographic data were obtained from medical records. Results: One hundred and nineteen patients were submitted to tympanomastoidectomy. In most cases, pre-operative CT scans showed cholesteatoma in the attic (50%) and large extension of the disease (29%), semicircular or fallopian canal erosion (by order of appearance), was identified in 67.1%. When compared to the intra-operative findings, CT scans of the ears showed a high sensitivity (90.5%) and specificity (90.9%) in the identification of cholesteatoma, with negative results in the characterization of the extension of the disease – table 1.

The audiometric tests showed an average Rinne of 32dB before surgery. Patients with cholesteatoma in the attic had higher air-bone gaps. In patients with affected sinus tympani, sixty percent of the patients underwent a canal wall-down (open) procedure, with increasing tendency over the years. Nevertheless, younger patients were preferably submitted to canal wall-up tympanomastoidectomy – chart 2. Almost of the patients (90%) had history of ipsilateral ear affection. Cholesteatoma surgery (absolute frequency – AF) and the recurrence rate were significant, despite the high percentage of canal wall-down procedures. Factors for failure remain uncertain and CT scans presented limited value in the diagnosis and evaluation of cholesteatoma, especially in post-operative.

In the absence of better diagnostic procedures, we recommend second look surgery to control cholesteatoma’s recurrence.

REFERENCES