Age and Time Interval Differences in Recurrent and Residual Cholesteatoma Rates for Canal Wall Up Tympanomastoidectomy

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Seventy-two patients qualified for the study. Residual cholesteatoma was more frequent in children (<15 years) than adults (p=0.026, Fisher’s exact test). There was a tendency for recurrent cholesteatoma to occur more frequently in adults than in children. Recurrences tended to occur more frequently in cases with larger canal wall defects. The time interval between the primary and revision surgery did not influence the rate of residual or recurrent cholesteatoma.

CONCLUSION

Cholesteatoma is an aggressive non-neoplastic disease that can be managed by canal-wall-up tympanomastoidectomy. Our study suggests younger patients have a higher risk of residual cholesteatoma, possibly secondary to more technically challenging anatomy and surgeon preference to maintain an intact canal wall. Time between primary and revision surgery may be able to be abbreviated or prolonged, if desired, since this time interval did not influence the rate of residual and recurrent cholesteatoma.

METHODS AND MATERIALS

This is a longitudinal study of second-look tympanomastoidectomies performed at a tertiary-care center between 2002-2010. Only patients who had both their primary and second-look procedures by the same surgeon were followed. Statistical analysis was performed to determine whether patient age and time interval between initial and second look procedures correlated with residual or recurrent cholesteatoma.

RESULTS

 Seventy-two patients qualified for the study. Residual cholesteatoma was more frequent in children (<15 years) than adults (p=0.026, Fisher’s exact test). There was a tendency for recurrent cholesteatoma to occur more frequently in adults than in children. Recurrences tended to occur more frequently in cases with larger canal wall defects. The time interval between the primary and revision surgery did not influence the rate of residual or recurrent cholesteatoma.

OBJECTIVES

1) To evaluate whether residual or recurrent cholesteatoma found during second-look tympanomastoidectomies correlates with age

2) To evaluate whether there is a difference in residual or recurrent cholesteatoma found during second-look tympanomastoidectomies done before and after 9 months since the initial procedure

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