

## **Canal wall down mastoidectomy in pediatric cholesteatoma in rural areas of Egypt**

### **Abstract:**

**Objectives:** There is debate about the choice of plan of management of pediatric cholesteatoma whether canal wall-up with second look or canal wall-down with mastoid obliteration. Trying to solve this debate we conducted a 3-year retrospective analysis in management of pediatric cholesteatoma in rural areas of Egypt. **Study design:** Retrospective data analysis. **Location:** Tertiary care university hospital. **Patients:** Sixty children below 17 years who underwent surgery for cholesteatoma between January 2007 and December 2010 were included in the study. **Methods:** A comparison of recurrence and residual rates in CWD versus CWU with analysis of staging of the procedure, the difficulty of the technique, extension of the disease, ossicular chain reconstruction and hearing results. **Results:** Patients were aged between 6 to 17 years (mean 12.5). They were 38 males and 22 females. Total 63 operations were performed for 60 patients. Fifty-two has performed CWD and 11 have performed CWU mastoidectomy. The mean follow-up period was 13 months (range 5-36 months). Recurrence rate for CWD and CWU was 5.4% and 57.1% respectively, while residual rate was 2.7% and 14.2% respectively. The average air-bone gap improvement in CWD and CWU was 6.41 and 6.08 dB respectively. Cholesteatoma was found to be extensive in 92.3% of patients. **Conclusion:** Pediatric cholesteatoma is aggressive. One stage CWD mastoidectomy with obliteration and meatoplasty is a safe adequate and suitable technique to avoid residual and recurrence and the chance for second operation. Its hearing results are satisfactory in comparison with CWU which should be preserved for very limited and early disease.