

# Surgical Outcomes of Mastoidectomy in the Management of Cholesteatoma

Rain Puiman Yan<sup>1</sup>, Ka-Chun Wong<sup>2</sup>

1. School of Medicine, National University of Ireland, Galway, 2. Dept. of Otorhinolaryngology, Head and Neck Surgery, Yan Chai Hospital, Kowloon West Cluster Hospital Authority, Hong Kong.

## **Background:**

Cholesteatoma is a collection of benign epidermal and connective tissue growth behind the eardrum. Surgery is often indicated, and more than one surgical procedure may be performed. Mastoidectomy is a standard procedure to treat this condition but the outcomes are poorly studied. Our objective is to investigate the outcomes of this surgery and its effects on patients.

## **Methods:**

A literature search was performed to summarize evidence on surgical outcomes of all cases of cholesteatoma who underwent mastoidectomy. Study quality of included publications is assessed using the STROBE checklist.

## **Results:**

We reviewed articles on the short and long-term outcomes of mastoidectomy for cholesteatoma, including tympanoplasty with mastoidectomy. Post-operative recurrence of cholesteatoma was one of the most common complications identified across all articles cited. Other residual deficits include hearing loss, recurrent infections, and the need for second surgery for complete resection and reconstruction. Facial paralysis was also described in severe cases.

## **Conclusion:**

The studies demonstrated recurrent cholesteatoma, hearing loss, and revision surgery were frequently observed consequences of mastoidectomy. Regardless, questions on limited surveillance arise as few articles were sourced. Further study is recommended to observe the indications of mastoidectomy on the patient's quality of life for the management of cholesteatoma.