

Comparative Study of Clinical and Audiological Outcome between Autologus and Prosthesis in Ossicular Chain Reconstruction

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Abstract

Introduction: Ossiculoplasty is one of the commonly done and challenging surgery in otology and has been done using various graft materials. Materials such as autologous cartilage (tragal or conchal) or allograft (homograft) of the same tissue and synthetic materials like polyethylene TORP, ceramic and hydroxyapatite PORP or Titanium prosthesis have been used. But the latter synthetic materials are expensive and have high extrusion rates. Autologous cartilage grafts are selected for Ossiculoplasty as they are easy to harvest at the same site of operation, non-toxic, has less extrusion rate, minimum shrinkage and lateralization. **Aims and Objective:** The aim of this study is to know the efficacy of autologous graft and prosthesis in ossicular reconstruction and to evaluate hearing outcome along with extrusion rate among them. **Methodology:** It is a prospective study done on patients attending ENT outpatient department in civil hospital Ahmedabad affiliated to BJ medical college Ahmedabad. 60 patients were included in the study who underwent ossicular reconstruction either with canal wall up or down mastoidectomy with tympanoplasty. **Conclusion:** On follow up of 60 patients over six month we followed there is significant air bone gap reduction with prosthesis but there is risk of extrusion which cancel out beneficial effect of prosthesis. Whereas cartilage and incus remodelling give good result in air bone reduction and better take up compare to prosthesis with less extrusion rate. Also, autologous grafting in ossicular chain reconstruction is economical in developing countries like India with disease prevalent among low socioeconomic group.

Keywords: PORP/TORP, Ossicular chain reconstruction, incus remodelling, CSOM, Mastoidectomy