

## **Middle Ear Implants In The Elderly: Five Years' Experience At The Seoul Veterans Health Service Medical Center**

Hyun Sang Cho, Sung Hwan Lim and Choon Dong Kim

Department of Otorhinolaryngology-Head and Neck Surgery, Veterans Health Service Medical Center, Seoul, Korea

**Objectives:** To compare audiological benefits in the elderly who underwent MEI surgery between pre-operation and post-operation. To evaluate the experience of 31 patients who underwent MEI surgery.

**Background:** The elderly population has increased dramatically, and so the hearing impairment of the elderly has emerged as a major problem.

Middle ear implants are suitable for those with a mild-moderate mixed or conductive hearing loss or a sensorineural hearing loss. A middle ear implant is a more recent hearing implant, offering an alternative to conventional hearing aids.

**Methods:** Records of patients who received MEI surgery at the Seoul Veterans Health Service Medical Center. Preoperative and postoperative bone and air-conduction thresholds, auditory gain, and speech discrimination were compared.

**Results:** The range of hearing benefit shown by functional gain in patients with implantable middle ear implants (median) was 20.5 dB. Median preoperative unaided word recognition was 62% at 60 dB HL, improved postoperatively to median 78% correct at 65 dB HL and 85% at 80 dB HL

**Conclusions:** MEI could be one of the safe and reliable treatment options available for auditory rehabilitation in the elderly. Since veterans healthcare population has high hearing difficulty prevalence rate due to its' high proportion of the elderly, implantable middle ear implants carries an important role in case of conventional hearing aids are ineffective to provide audiologic gain.