**ABSTRACT**
Objectives: To review the indications, efficacy, and long-term outcomes of cochlear implantation in IgM deficiency.
Methods: Study design – retrospective case report.
Results: The patient with IgM deficiency and chronic suppurative otitis media underwent cochlear implantation as a staged procedure three months after mastoid obliteration, petrosectomy, eustachian tube obliteration, blind sac closure of the external auditory canal, and cavity obliteration with abdominal fat and a temporalis muscle flap. The patient has done well post-operatively without complications and with significant improvement in speech discrimination scores.
Conclusion: For patients with IgM deficiency and chronic suppurative otitis media, mastoid obliteration, petrosectomy with temporalis muscle and abdominal fat graft as a staged procedure appears to be an effective means to facilitate cochlear implantation in the IgM-deficient patient.

**INTRODUCTION**
Patients with severe to profound sensorineural hearing loss in association with active chronic suppurative otitis media or a mastoid cavity after cholesteatoma surgery present significant challenges to successful cochlear implantation. Potential complications include infection of the implant with associated labyrinthitis or meningitis, and extrusion of the implant. Leung and Briggs (1) have proposed mastoid obliteration with cochlear implantation as a one- or two-stage procedure. In the present case, the patient with IgM deficiency and chronic otomastoiditis underwent a two-stage procedure described below.

**RESULTS**
The patient has done well post-operatively without complications and with significant improvement in speech discrimination scores. The follow up period has been 18 months. The patient has subsequently undergone a right mastoid obliteration without cochlear implantation.

**CONCLUSION**
For patients with IgM deficiency and chronic suppurative otitis media, mastoid obliteration, petrosectomy with temporalis muscle and abdominal fat graft as a staged procedure appears to be an effective means to facilitate cochlear implantation in the IgM-deficient patient.

**METHODS AND MATERIALS**
The patient is a 50-year-old Caucasian female with IgM deficiency and chronic suppurative otitis media and otomastoiditis. The patient has suffered from severe bilateral granulomatous otomastoiditis and sinusitis requiring multiple surgeries. The patient underwent cochlear implantation of the left ear as a staged procedure three months after mastoid obliteration, petrosectomy, eustachian tube obliteration, blind sac closure of the external auditory canal, and cavity obliteration with abdominal fat and a temporalis muscle flap.

**REFERENCES**
2. Gantz B. Personal communication.