

IOOG Categorisation of Tympanomastoid Surgery: the SAMEO-ATO Framework

SAMEO for Mastoid Surgery

S Stage of surgery

- S1 Primary (first surgery)
- S2p Planned (2nd look or staged procedure)*
- S2r Revision (unplanned)*

**S2 represents non-primary surgery and not the number of previous surgery*

A Approach

- A1 Endoscopic transcanal
- A2 Microscopic transcanal
- A3 Endaural**
- A4 Retroauricular

***A1 and A2 become A3 when a (external/widening) incision is made*

M Mastoidectomy

- Mx No mastoidectomy
- M1a Mastoidectomy with canal wall preserved (cortical mastoidectomy)
- M1b Mastoidectomy with canal wall preserved (cortical mastoidectomy)
+ posterior tympanotomy
- M2a Mastoidectomy with superior scutum removed only (atticotomy)
- M2b Mastoidectomy with superior scutum and postero-superior canal wall removed
(attico-antroscopy)
- M2c Mastoidectomy with whole canal wall removed
(modified radical or radical mastoidectomy)
- M1a+2a Mastoidectomy with canal wall preserved + atticotomy
- M1b+2a Mastoidectomy with canal wall preserved + posterior tympanotomy + atticotomy
- M3a Subtotal Petrossectomy with preservation of otic capsula***
- exenteration of all mastoid and middle ear pneumatized cells
- M3b subtotal Petrossectomy with removal of the otic capsula
- includes labyrinthectomy and/or removal of the cochlea

**** M3a differs from M2c in that the eardrum is removed intentionally prior to obliteration of cavity and blind pit closure as well as blocking up of the tympanic opening of the Eustachian tube*

E External ear canal reconstruction

- Ex No external ear canal reconstruction
- E1 Reconstruction with soft materials[†]
- E2 Reconstruction with rigid materials[†]

† space behind graft not obliterated

O Obliteration of mastoid cavity

- Ox No obliteration
- O1 Partial obliteration^{††}
- O2 Total obliteration^{††}

†† Total obliteration is obliteration of the whole mastoid and attic cavities. Partial obliteration spares the attic cavity ± part of mastoid cavity (ie just a reduction of the size of cavity)