

## *ATO for Middle Ear Surgery*

### **A** Access to middle ear

- Ax No bone removal from the external ear canal wall  
(flattening of suture line alone is still considered as Ax)
- A1 Widening of the posterior portion of tympanic sulcus  
(including canal curettage or drilling to visualise the ossicular chain or hypotympanum)
- A2 Partial or circumferential widening of the bony canal (canalplasty)
- A3 Total canalplasty with soft tissue grafting of exposed bone<sup>†††</sup>

<sup>†††</sup> *The IOOG Categorization does not apply to congenital meatal atresia. A3 differs from A2 in the absence of original canal skin.*

### **T** Tympanic membrane

- Tx No tympanic membrane grafting performed
- Tn Original tympanic membrane preserved
- T1 Supplement to intact tympanic membrane (reinforcement)
- T2 Partial tympanic membrane grafting
- T3 Subtotal / total tympanic membrane grafting<sup>††††</sup>

<sup>††††</sup> *Total perforation is defined as complete absence of the tympanic membrane and annulus. Subtotal perforation is the absence of tympanic membrane but the annulus is still preserved.*

### **O** Ossicular chain

- Ox No reconstruction performed
- On Intact chain preservation
- Osi Reconstruction between incus and stapes head  
(IS joint repair, bone cement, prosthesis or cartilage)
- Osm Reconstruction between malleus and stapes head
- Ost Reconstruction between tympanic membrane and stapes head
- Osd Tympanic membrane directly repositioned onto stapes head
- Ofi Reconstruction between incus and stapes footplate
- Ofm Reconstruction between malleus and stapes footplate ( $\pm$  stapes preserved)
- Oft Reconstruction between tympanic membrane and stapes footplate ( $\pm$  stapes preserved)
- Ofd Tympanic membrane directly repositioned onto stapes footplate
- Ovi Reconstruction between incus and vestibule (including stapedotomy)
- Ovm Reconstruction between malleus and vestibule (malleo-stapedotomy)  
( $\pm$  tissue graft seal over vestibule)
- Ovt Reconstruction between tympanic membrane and vestibule ( $\pm$  tissue graft seal over vestibule)