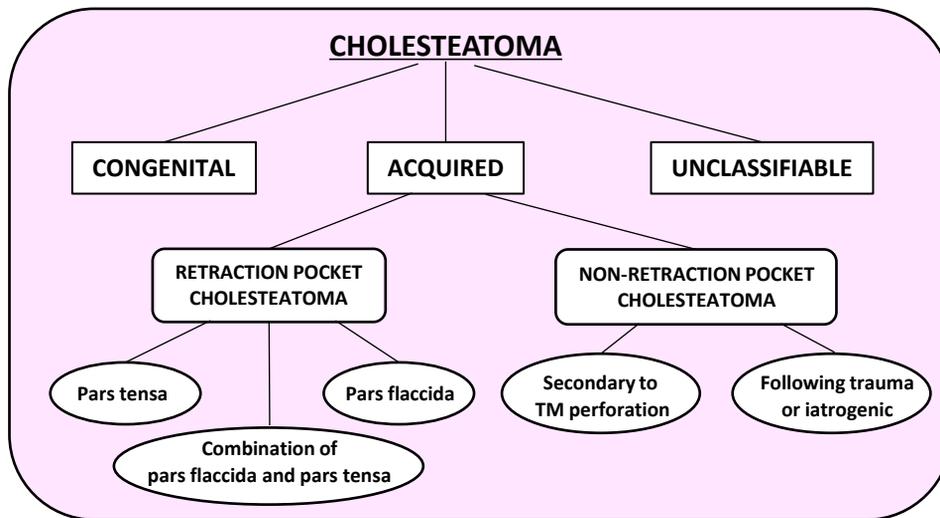


# EAONO/JOS system 2017 Classification and Staging of Middle Ear Cholesteatoma

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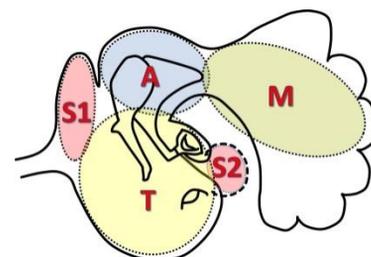
## Classification of Middle Ear Cholesteatoma



## Staging of Middle Ear Cholesteatoma

### 1. Divisions of the middle ear space (STAM system)

In order to simplify the extent of cholesteatoma, the middle ear and mastoid space is divided into four sites: the difficult access sites (S), the tympanic cavity (T), the attic (A) and the mastoid (M). The difficult access sites (S) includes S1, the supratubal recess (also called the anterior epitympanum or protympanum) and S2, the sinus tympani. The posterior border of the attic is the posterior end of the incus short process or the fossa incudis. The mastoid includes the antrum and the mastoid cells.



### 2. The EAONO/JOS staging system applies to 4 types of middle ear cholesteatoma

(Pars flaccida cholesteatoma, pars tensa cholesteatoma, congenital cholesteatoma and cholesteatoma secondary to a tensa perforation)

|                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Stage I</b></p> <p><b>Cholesteatoma localized in the primary site*</b></p> <p>* The site of cholesteatoma origin, i.e. the attic (A) for a pars flaccida cholesteatoma; the tympanic cavity (T) for pars tensa cholesteatoma, congenital cholesteatoma and cholesteatoma secondary to a tensa perforation.</p> | <p><b>Stage III</b></p> <p><b>Cholesteatoma with extracranial complications or pathologic conditions including</b></p> <p>facial palsy (FP), labyrinthine fistula (LF): with conditions at risk of membranous labyrinth, labyrinthitis, canal wall destruction (CW): more than half length of the bony ear canal, destruction of the tegmen (TD): with a defect that requires surgical repair, adhesive otitis (AO): total adhesion of the pars tensa, postauricular abscess or fistula, zygomatic abscess, neck abscess (NA)</p> |
| <p><b>Stage II</b></p> <p><b>Cholesteatoma involving two or more sites</b></p>                                                                                                                                                                                                                                       | <p><b>Stage IV</b></p> <p><b>Cholesteatoma with intracranial complications including</b></p> <p>purulent meningitis, epidural abscess, subdural abscess, brain abscess, sinus thrombosis, brain herniation into mastoid cavity</p>                                                                                                                                                                                                                                                                                                |

The staging system does not apply to petrous bone cholesteatoma.

### 3. Staging systems for respective cholesteatoma types

#### Pars flaccida cholesteatoma (attic cholesteatoma)

- Stage I : Cholesteatoma localized in the attic
- Stage II : Cholesteatoma involving two or more sites
- Stage III: Cholesteatoma with extracranial complications
- Stage IV: Cholesteatoma with intracranial complications

#### Pars tensa cholesteatoma, Cholesteatoma secondary to a tensa perforation and congenital cholesteatoma

- Stage I : Cholesteatoma localized in the tympanic cavity
- Stage II : Cholesteatoma involving two or more sites
- Stage III: Cholesteatoma with extracranial complications
- Stage IV: Cholesteatoma with intracranial complications