

JOS system 2016 (日本耳科学会案) Staging and Classification for Middle Ear Cholesteatoma

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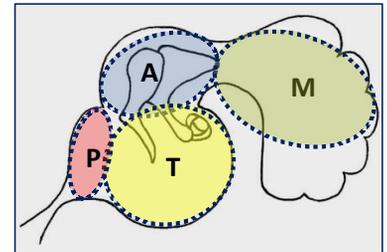
Classification of Middle Ear Cholesteatoma

- I. Acquired cholesteatoma
 - 1) Retraction pocket cholesteatoma (*so-called primary acquired cholesteatoma*)
 - a) Pars flaccida cholesteatoma (Attic cholesteatoma)
 - b) Pars tensa cholesteatoma
 - c) Combination of pars flaccida and pars tensa cholesteatoma
 - 2) Non retraction pocket cholesteatoma
 - a) Cholesteatoma secondary to a chronic tensa perforation (*so-called secondary acquired cholesteatoma*)
 - b) Transplanted cholesteatoma following trauma or otologic procedures
- II. Congenital cholesteatoma
- III. Unclassifiable cholesteatoma

Staging of Middle Ear Cholesteatoma

1. Divisions of the middle ear space (PTAM system)

Schematic drawing of divisions of the tympanomastoid space. The tympanomastoid space is divided into four sections: the protympanum (P), the tympanic cavity (T), the attic (A) and the mastoid (M) in order to represent the extent of cholesteatoma.



2. The 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)

Stage I

Cholesteatoma localized in the primary site*

* 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.

Stage II

Cholesteatoma involving two or more sites

Stage III

Cholesteatoma with extracranial complications and/or intratemporal pathologic conditions

Facial palsy (FP), labyrinthine fistula (LF): with conditions at risk for membranous labyrinth, labyrinthine disturbance (LD): scale out BC values for more than two speech frequencies (0.5, 1, and 2kHz), canal wall destruction (CW): more than half the length of the bony ear canal, adhesive otitis (AO): total adhesion of the pars tensa, petrous bone or skull base destruction (PB), neck abscess (NA).

Stage IV

Cholesteatoma with intracranial complications including

Purulent meningitis, epidural abscess, subdural abscess, brain abscess, sinus thrombosis, etc.

3. Sub-classification of stage I for respective cholesteatoma types

Pars flaccida cholesteatoma

Stage I: Cholesteatoma localized in the attic

Stage Ia: A retraction pocket with epithelial self-cleaning function

Stage Ib: A retraction pocket with persistent accumulation of keratin-debris

Pars tensa cholesteatoma

Stage I: Cholesteatoma localized in the tympanic cavity

Stage Ia: A retraction pocket with epithelial self-cleaning function

Stage Ib: A retraction pocket with persistent accumulation of keratin-debris

Cholesteatoma secondary to a tensa perforation

Stage I: Cholesteatoma localized in the tympanic cavity

Stage Ia: Epithelial invasion confined to the underside of the pars tensa

Stage Ib: Epithelial invasion extending to the tensor tympani tendon and the promontorial wall

Congenital cholesteatoma

Stage I: Cholesteatoma localized in the tympanic cavity

Stage Ia: Cholesteatoma confined to the anterior half of the tympanic cavity

Stage Ib: Cholesteatoma confined to the posterior half of the tympanic cavity

Stage Ic: Cholesteatoma involving both of sides of the tympanic cavity