The treatment of cholesteatoma requires surgical intervention. The primary goal of surgery is to achieve a dry and safe ear and to improve hearing as a secondary goal. The choice of surgery depends on the extension of the disease, surgical expertise and patient’s willingness for second look procedure and long term follow up. The treatment options include:

1. Atticotomy,
2. Canal wall up (CWU) mastoidectomy
3. Canal wall down (CWD) mastoidectomy.

Atticotomy involves the removal of the scutum overlying the epi-typanum with a wide exposure of the attic and aditus ad antrum. The atticotomy approach is usually used to treat limited attic cholesteatoma and symptomatic retraction pocket. Atticoantrostomy is performed by the anterior-posterior technique, which is through exposure of the attic followed by proceeding backwards into the aditus ad antrum and mastoid antrum.

CWU mastoidectomy is also referred to as the intact canal wall technique or closed technique where the posterior wall of the external auditory meatus is kept intact. This procedure is a combination of a simple mastoidectomy with transcanal approach to middle ear, mastoid, epi-tympanum and aditus ad antrum.

Modified radical mastoidectomy or CWD surgery is carried out to convert the middle ear, mastoid antrum, attic and aditus ad antrum into a common cavity in eradicating disease in the middle ear and mastoid. Posterior external auditory canal wall will be brought down. This common cavity is exteriorised to external auditory meatus. The remnants of the tympanic membrane and ossicular remnants (malleus handle and stapes) are not removed.

While mastoidectomy is an operation to eradicate the disease of mastoid and middle ear, tympanoplasty is an operation to restore and reconstruct middle ear hearing mechanism. According to modified Wullstein’s classification, there are 5 types of tympanoplasty. Columella reconstruction to restore sound conduction from tympanic membrane to oval window is done in type III tympanoplasty. In type IV reconstruction, stapes footplate will be directly exposed to incoming sound and tissue graft is placed to acoustically shield the round window.

REFERENCES