MIDDLE EAR VENT TUBES

Complications
Gradual extrusion of a Collar Button tube. Mild foreign body reactions have formed a cuff of dry keratin around the tube, probably present > 12/12. Extrusion will follow within months.
Pars tensa tympanosclerosis, subsequent to a Collar Button tube insertion. A common response, generally clinically unimportant.
Extrusion of a Collar Bobbin, complicated by recurrent serous OME. The drum has the characteristic honeyed discoloration. Hair in the EAC.
Shepard with wire tube extrusion. The tube lies in the deep EAC, but a serous OME has reformed, seen as a yellow colouration of the pars tensa.
Post-myringotomy scar on a right pars tensa. The mark is in the classic antero-inferior quadrant where there are no at risk structures deep to the site. Hair in the EAC.
A large dimple in the lower pars tensa resulting from a prolonged Collar Button insertion. Mild tympanosclerosis, minimal hearing loss.
A dimpled posterior pars tensa resulting from a Shepard tube insertion in the rear drum. Not the preferred tube site, but the canal is narrow and tortuous.
An inferior dimple in the pars tensa following extrusion of a Collar Button tube. The drum is slightly opaque, but a serous effusion is present, seen via the atrophic dimple.
A large Collar Button-induced dimple in the anterior drum. Chronic tubal insufficiency has caused mild drum collapse. Keratin debris above, but no cholesteatoma.
Retro-tympanic Duravent grommet. Cause uncertain, possible self-cleaning attempts. Leave be, or if prone to infection/effusions, extract via a generous myringotomy.
Debris semi-occluding a .75 Collar Bobbin. Crystalline dried secretions have formed a core in the tube, but the v-lumen has resulted in spontaneous extrusion into the EAC,
Occluded Collar Button tube. Mucoid effusion has formed a dry plug in the cylindrical lumen. An effusion has reformed in the middle ear.
Occlusion of a 1.14 mm Collar Bobbin in a chronic effusion case. Stage 3* collapse is present; the incus is necrosed. The lumen has been cleared of a dry “cork” (right), but is closed medially by soft tissue undergrowth.

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Collar Button tube occlusion. A recent infection has produced diffuse debris in the EAC. Oedematous mucosa can be seen blocking the deep lumen.
Collar Button blockage with ceruminous debris. The middle ear remains aerated, but clearing the lumen of semisolid wax may prove difficult.

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Debris surrounding a long term Austin cylindrical tube. Inspection of the longer lumen to assess any blockage is difficult, and cleaning seldom effective.
Chronic T-tube pathology. A long term tube has been in situ for some years. A recent foreign body reaction has caused bleeding and infection. Collapse of the rear pars tensa.
Bloody otorrhoea subsequent to vent tube use. Sometimes secondary to bacterial infection, otherwise a sterile bleed secondary to possible trauma or tube vibration within the drum.
Profuse purulent otorrhoea, prior vent tube insertion. Probable URTI origin, rather than grommet-related. Treat with amoxycillin-clavulanic acid, plus antibiotic drops.
Mucopurulent otorrhoea, vent tube in situ. Possibly pseudomonal, water soiling or tissue reaction origin. Treat with ciprofloxacin drops and amoxycillin-clavulanic acid.
Actively infected vent tube site. Cause uncertain. Treat for both URTI and EAC origins (amoxycillin-clavulanic acid and ciprofloxacin drops).
Extruding vent tube and a small granulation. Middle ear sterile. Remove the grommet and treat with ciprofloxacin drops.
Duravent grommet and tube granuloma. Ciprofloxacin drops may eradicate the granuloma over several weeks.
A large tube granuloma and active infection. Remove the granuloma by suction, then extract the tube with micro-alligator forceps, plus systemic antibiotics and drops.
Impacted long term T-tube. Gross dry debris around the shaft. Probable impending permanent perforation. Remove the tube and observe the site for further OME.
Posterior pars tensa perforation secondary to long term tube use. The perforation rate rises after two years. Longer tube use risks the need for repair.
Longstanding T-tube outcomes. The drum is collapsed and a permanent defect is developing around the tube. Extract the tube, repair the drum with a total composite, and aid.
Dual long term tube use. Inappropriate and inadvisable. The cylindrical lumen of each is blocked by a dry mucus plug.
Remove the tubes, repair and aid.
Contralateral ear. Chronic thick mucus may indicate mucociliary disease that may not respond to ventilation efforts.
Custom earplugs, designed to minimise vent tube soiling during water sports. Combine with a cap or band to retain position.
Hard debris overlying a long term Duravent tube, which is just visualised.