Tympanomastoidectomy

Description

Left canal wall down tympanomastoidectomy with ossicular chain reconstruction, microdissection, NIM facial nerve monitoring for three hours. (Medical Transcription Sample Report)

Preoperative Diagnosis

Left canal cholesteatoma.

Postoperative Diagnosis

Left canal cholesteatoma.

Operative Procedure

- 1. Left canal wall down tympanomastoidectomy with ossicular chain reconstruction.
- 2. Microdissection.
- 3. NIM facial nerve monitoring for three hours.

Complications

None.

Findings

There is an extremely large canal cholesteatoma, which eroded most of the posterior and superior canal wall. There was a significant amount of myringosclerosis and tympanosclerosis. There is some mild erosion of the lenticular process of the incus. The facial nerve was normal. We removed the incus, removed the head of the malleus, and placed a titanium-PORP from the stapes capitulum to a cartilage graft.

Procedure

The patient was taken to the operating room, placed under general anesthetic and intubated without

difficulty. The NIM facial nerve monitoring electrodes were positioned and monitoring was performed throughout the procedure. There was no abnormal activity during this case. We inspected the ear canal, identified the huge defect, which was completely filled with cerumen. Through the ear canal, we removed as much as we could and then infiltrated the canal and postauricular area with 1:100,000 of epinephrine. We prepped and draped the ear in a sterile fashion. We reopened the previously used postauricular incision and dissected down the mastoid cortex. We reflected the soft tissues anteriorly to the level of the ear canal and identified where the ear canal skin entered the defect in the mastoid bone. A #6 cutting bur was used to drill down the mastoid cortex and identified this cholesteatoma which was then carefully dissected out. We went all the way to the mastoid antrum. We finished a complete mastoidectomy with identification of the tegmen, sigmoid sinus. We removed the lateral aspect of the mastoid tip. We lowered the facial ridge. The incudostapedial joint was already membranous in nature, we went ahead and used the joint knife and removed the incus. We separated the incus from the stapes and then removed it. We used a malleus head nipper to remove the head of the malleus and then we continued to saucerize the entire mastoid cavity. There was no cholesteatoma within the middle ear space, but there was roughly 40% surface area perforation. The remaining portion of the tympanic membrane was extremely calcified and myringosclerotic; this was removed. There was also a large focus of tympanosclerosis between the stapes crura, which was impinging the ability of the stapes to move. We carefully dissected this out. This did seem to improve the mobility of the stapes somewhat. At this point, there was a near total perforation. There was only a minimal amount of anterior remnant of the drum left. We tried to go ahead and harvest the temporalis fascia, but there was really only wisps of this fascia in place. He had already had a previous tympanoplasty, but even outside the areas where the graft was taken, the temporalis muscle was quite atrophied and lumpy, and I suspect this was due to his chronic disease and long history of corticosteroid usage. We harvested a few pieces as best as we could. We went ahead and did a meatoplasty by making a canal incision in the 6 o'clock and 12 o'clock positions. We excised cartilage posteriorly and inferiorly to enlarge the meatus. This cartilage was thin and used for cartilage tympanoplasty. We placed some Gelfoam in the middle ear space and placed the cartilage on the top of it. We did cut a titanium-PORP of the proper side and placed on top of the stapes capitulum to interface with the cartilage cap. A few other small pieces of temporalis fascia were used to bulge through the surrounding edges of the cartilage and make sure that it was medial to any remnant of ear canal and tympanic membrane remnants. We placed a layer of Gelfoam lateral to the graft, closed the postauricular incision in layers and put 2 Merocel packs in the ear. Glasscock dressing was applied. The patient was awakened from anesthesia and taken to the recovery room in stable condition. He will be given antibiotics and pain medicines and he will be given instructions to follow up with me in one week.