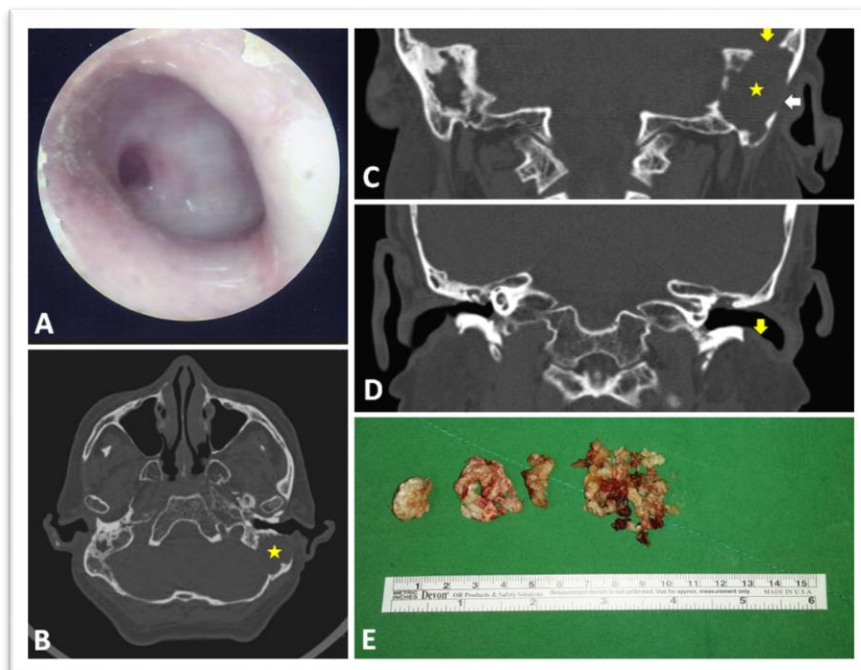


## Huge Mastoid Cholesteatoma with Skull Base Erosion and CSF Leak

Chin-Lung Kuo, MD, PhD<sup>1,2</sup>; An-Suey Shiao, MD<sup>1\*</sup>

<sup>1</sup>Department of Otolaryngology-Head and Neck Surgery, Taipei Veterans General Hospital, Taipei, Taiwan

<sup>2</sup>Department of Otolaryngology, Taoyuan Armed Forces General Hospital, Taoyuan, Taiwan



**A** 59-year-old man presented with recent hearing deterioration. He had a history of chronic otitis media in both ears and had suffered from occasional ear discharge since childhood. Despite the fact that local medical practitioners had referred the patient to otologists in tertiary hospitals, he refused these visits due to personal reasons. The patient had no other notable medical history, including no headache, vertigo, or otalgia. An otoscopic examination of both ears revealed total perforation of the tympanic membrane. Furthermore, thick granulation with a central hole on the left side covered the entire middle ear (A); however, there were no signs of nystagmus or fistula, and the remainder of the neurological examination was non-contributory. Nonetheless, a hearing test revealed severe bilateral mixed hearing loss at all frequencies, and a CT scan revealed a huge soft tissue mass in the mastoid of the left ear (asterisk in B and C) as well as bony defects in the skull base (yellowish arrow in C), lateral mastoid cortex (whitish arrow in C), and external ear canal wall (yellowish arrow in D). Surgical exploration and a subsequent histopathology examination revealed a huge cholesteatoma (E) tightly adhered to the outer dura of the left posterior cranial fossa. An extensive mastoidectomy was performed to define the magnitude of the cholesteatoma (video). Persistent CSF leakage was identified during this procedure. This complication was rectified by grafting a commercially available collagen matrix graft over the leak (DuraGen).

DOI: 10.24983/scitemed.paciv.2017.00004



[Video Link](#)

---

**\*Correspondence:** An-Suey Shiao, MD  
Department of Otolaryngology-Head and Neck Surgery, Taipei Veterans  
General Hospital, Taiwan. Email: [asshiao@gmail.com](mailto:asshiao@gmail.com)

**Received:** May 1, 2017; **Accepted:** May 1, 2017; **Published:** May 2, 2017

Preprint Archives of Clinical Images & Videos. 2017;1(1):2  
DOI: [10.24983/scitemed.paciv.2017.00004](https://doi.org/10.24983/scitemed.paciv.2017.00004)

**Copyright** © 2017 The Author(s). This is an open-access article distributed  
under the terms of the Creative Commons Attribution 4.0 International  
License (CC-BY).