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MANAGEMENT ALGORITHM FOR CSF LEAK IN COMPLEX TEMPORAL BONE PATHOLOGY

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INTRODUCTION: Wide spectrum of temporal bone pathology can present with cerebrospinal fluid (CSF) leak. This originates from the defects in the temporal bone that can be spontaneous, traumatic, pathological c and iatrogenic1. Most common routes are from window dehiscence, along fracture lines, inner ear malformations. Complications of CSF leak include otogenic meningitis, temporal lobe abscess and otic hydrocephalus[2,3].

Methods: This Study is a case review of three patients, presented with varied etiology of CSF leaks

Case 1: Post RTA B/L temporal bone fracture with unilateral CSF otorhinorrhea with total facial palsy with profound SNHL.

Case 2: Petrous cholesteatoma recurring in a previous mastoid cavity with large tegmen and dural erosion, fungus cerbri and CSF leak

Case 3: Adolescent girl with unilateral cochleovestibular dysplasia presenting with recurrent meningitis due to spontaneous CSF otorhinorrhea

The investigations and surgical management of the above will be highlighted.

Results: All the patients had successful repair of defects to achieve complete arrest of leak by following meticulous approach with a multi-layered closure and post op management with neuro monitoring4. The protocol of CSF leak repair used in our institute will be discussed

Conclusion: CSF otorrhea is a rare entity. Diagnosis is suspected through otorrhea, aural fullness, hearing loss and radiological investigations. Surgery is successful when managed at a tertiary referral centre having an experienced skull base team[5].

References

1. Friedman RA, Cullen RD, Ulis J, Brackmann DE, Management of cerebrospinal fluid leaks after acoustic tumor removal. Neurosurgery.2007 Sep;61(3 Suppl):35-9; discussion 39-40
2. Pelosi S, Bederson JB, Smouha EE. Cerebrospinal fluid leaks of temporal bone origin: selection of surgical approach. Skull Base 2010; 20: 253-259.
3. Jackler RK. Fractures of the Cranial Base, Encephalocele of the Middle Fossa Floor, Cerebrospinal Fluid Leak. In: Jackler RK, Ed. Atlas of Skull Base Surgery and Neurotology. 2nd Ed. Thieme, New York, 2009; 181-184, 185-188, 189-193.
4. Leslie K, Clayton E, and Edward E.D Transmastoid Approach to Spontaneous Temporal Bone Cerebrospinal Fluid Leaks: Hearing Improvement and Success of Repair Otolaryngology–Head and Neck Surgery 2014, Vol. 150(3) 472–478
5. Richard M.Irving, Raghunandhan S.Kumar. Surgical Management of Temporal Bone Meningoencephalocele and CSF Leaks, ENT Masterclass Journal January 2017.

Biography

Dr. Raghu Nandhan is Consultant ENT Surgeon at Madras ENT Research Foundation (MERF), Chennai a premier tertiary referral ENT care Institute in South India. He specializes in Neuro-Otology, Auditory Implantation & Skull-Base Surgery having received higher surgical training from reputed centers like Manchester and Birmingham in the UK. He is a Fellow of the Royal college of Surgeons of Edinburgh, overseas member of ENT UK and British Cochlear Implant Group. He has a decade of experience with Cochlear & Brainstem Implants at MERF, which is today one of the largest centers in the world for Implantation Otology and he is currently the clinical lead for Otology at this Institute. He holds a PhD in Cochlear Implant Audiology and is also the Research Lead at MERF with keen interest in spearheading the various ongoing and future research programs of the institution. He has around 70 publications in indexed medical journals and has presented research papers in International conferences around the world, where he has received awards. He has co-authored 7 textbook chapters and is one of the very few Indian authors to write chapters in Scott-Brown and Logan-Turner. Apart from his passion to be a competent clinician and skilled surgeon, he dedicates his professional time to being a researcher, academic, medical leader, teacher and trainer for his peers and junior colleagues.

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