

another institution were excluded. Twenty-two patients (age, 37 ± 13 yr) fit within the above condition. CT-scan was performed every year after surgery, and antrum pneumatization was evaluated. Pre- and post-operative pure-tone averages (PTA) and average air-bone gaps (ABG) were analyzed. PTA was calculated as the mean of 0.5, 1, 2, and 4 kHz thresholds. ABG was determined from air conduction (AC) and bone conduction (BC) thresholds that were measured at the same time. Average ABG (AABG) was calculated as the mean of 1, 2, and 4 kHz thresholds. Variables were shown in mean \pm SD. Hearing results were compared using Mann Whitney test.

Results: Twelve patients had the pneumatized antrum (P-Group) and 10 did not (non-P-Group). Following results were shown in P-Group and non-P-Group, respectively: (1) pre-operative PTA was 37 ± 8 and 40 ± 24 dB; (2) pre-operative AABG was 20 ± 8 and 18 ± 12 dB; (3) the change in PTA was 7 ± 12 and -1 ± 14 dB; (4) the change in AABG was 4 ± 13 and -2 ± 14 dB. The variables were not statistically different between two groups.

Conclusion: With this sample size, pneumatization of the antrum do not have an impact on hearing outcome statistically in patients operated with CWDT-STR.

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Analysis of the characteristics of hearing loss of PLF cases

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Learning Objectives: Background & Method: Perilymphatic fistula (PLF) is defined as an abnormal communication between the perilymph and middle ear, where there are leaky sites. The clinical manifestation of PLF is widely variable, and there was no physiological or biochemical diagnostic test for PLF that has the proper specificity and sensitivity. Therefore, it is very difficult to make a definite diagnosis of PLF. By the proteomic analysis, we have identified an isoform of Cochlin, CTP (Cochlin tomo-protein). CTP is a perilymph specific protein, which is not expressed in blood, CSF or saliva. We could establish a highly reliable ELISA-kit and again we could confirm this specific expression of CTP. With this background, in 2013, Japanese PLF diagnostic criteria was proposed. In this criteria, a definite diagnosis can be made with one of these basic rules, (1) a fistula is identified between the middle ear and the inner ear by microscope or endoscope, (2) Cochlin tomo-protein (CTP) is detected from the middle ear lavage (MEL). MEL was collected as follows: (1) after myringotomy or during PLF repair surgery, the middle ear was rinsed with 0.3 ml saline, (2) MEL was recovered and blood cells and cell debris were removed, (3) the supernatant was taken and stored frozen. If there is 2 μ l of perilymph in the MEL, the

test is positive. So far, we already have tested about 3000 samples including MEL, perilymph, serum, CSF etc. Between April 2014 and March 2015, 281 PLF suspected cases who had antecedent traumatic events were tested by the standardized CTP detection test protocol. In 281 cases, 61 (22%) were positive with CTP. The characteristics of hearing loss was vary, sudden hearing loss (26 cases), recurrent (8 cases), sudden and progressive (7 cases), progressive (7 cases) and fluctuate (5 cases). Our results indicates PLF is a real clinical entity and should be considered as pathological bases of sensorineural hearing loss.

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Method: So far, we already have tested about 3000 samples including MEL, perilymph, serum, CSF etc. Between April 2014 and March 2015, 281 PLF suspected cases who had antecedent traumatic events were tested by the standardized CTP detection test protocol.

Result and Conclusion: In 281 cases, 61 (22%) were positive with CTP. The characteristics of hearing loss vary, sudden hearing loss (26 cases), recurrent (8 cases), sudden and progressive (7 cases), progressive (7 cases) and fluctuate (5 cases). Our results indicates PLF is a real clinical entity and should be considered as pathological bases of sensorineural hearing loss.

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Tympanoplasty With Canal Wall Reconstruction Using Sliced Auricular Cartilage For Old Radicalized Cavities

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