Postoperative Results of Simple Myringoplasty with Fibrin Glue and Patients' Satisfaction

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The postoperative results for the simple myringoplasty with fibrin glue (Yuasa method) performed as a day surgery under local anesthesia between August 2000 and December 2012 were analyzed in 82 cases (75 cases of chronic otitis media, 4 cases of traumatic tympanic membrane perforation and others). The mean operating time was 37.4 minutes. The total rate of closure was 89.0%, and the total rate of successful hearing improvement was 91.5%. The perforations were classified into 4 groups. The rates of closure and successful hearing improvement were dropped in patients with large tympanic membrane perforation. In 4 patients with hearing aids who experienced the tympanic membrane perforations, the Yuasa method was performed to reduce the influence of conductive hearing loss. The patients' subjective hearing levels all improved. Furthermore, for 32 cases who underwent the Yuasa method between January 2007 and December 2012, the patient satisfaction was examined using a questionnaire survey. During the postoperative stage, none of the patients experienced anxiety after their going home.

Keywords : postoperative results, simple myringoplasty with fibrin glue, satisfaction, rate of closure, successful hearing improvement

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	Ia	Ib	II	III

Number of cases	24	24	26	8
Male	13	15	11	2
Female	11	9	15	6
Age (mean)	30-75 (58.4)	9-74 (55.7)	41-73 (59.5)	9-70 (55.1)
Ope. side	Right	13	12	9
	Left	11	12	17

Classification of tympanic membrane perforations

The perforations were classified into 4 groups. The number of cases, the operative side and other details can be seen.

Postoperative results

The total rate of closure was 89.0% and the total successful rate of hearing improvement was 91.5%.

	All cases		Ia		Ib		II		III	
Audiogram (mean (dB))	Pre ope.	Post ope.	Pre ope.	Post ope.	Pre ope.	Post ope.	Pre ope.	Post ope.	Pre ope.	Post ope.
Average hearing level	45. 0	31. 1	40. 4	26. 5	45. 8	32. 4	46. 2	30. 9	55. 3	41. 4
Air bone gap	20. 4	7. 4	18. 0	5. 3	20. 8	8. 2	21. 6	7. 6	23. 7	11. 1
Patch gain	13. 9		12. 9		13. 9		15. 9		12. 2	
Hearing improvement	14. 2		13. 9		14. 2		15. 3		14. 0	
Rate of closure (%)										
Perforation none	73 (89. 0)		22 (91. 7)		22 (91. 7)		23 (88. 5)		6 (75. 0)	
Perforation partially	5 (6. 1)		2 (8. 3)		0		1 (3. 8)		2 (25. 0)	
Re-perforation	4 (4. 9)		0		2 (8. 3)		2 (7. 7)		0	
Rate of successful hearing improvement (%)										
Success cases	75/82 (91. 5)		24/24 (100)		21/24 (87. 5)		24/26 (92. 3)		6/8 (75. 0)	
Hearing gain $\geq$ 15 dB	35/82 (42. 7)		8/24 (33. 3)		9/24 (37. 5)		13/26 (50. 0)		5/8 (62. 5)	
Hearing level $\leq$ 30 dB	44/82 (53. 7)		16/24 (66. 7)		10/24 (41. 7)		16/26 (61. 5)		2/8 (25. 0)	
Post ope. air bone gap $\leq$ 15 dB	74/82 (90. 2)		24/24 (100)		21/24 (87. 5)		23/26 (88. 5)		6/8 (75. 0)	