Application of hyperdry amniotic membrane patches without fibrin glue over the bony surface of mastoid cavities in canal wall down

tympanoplasty.

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Abstract:

Conclusion: Fibrin glue might be an inessential bioadhesive for attachment of hyperdry amniotic

membrane (AM) patches in canal wall down (CWD) tympanoplasty. Objective: To clarify the pliability

and adherence capability of human hyperdry AM, the feasibility of fixing hyperdry AM without fibrin

glue to the bony surface of the mastoid cavity was evaluated in CWD tympanoplasty. Methods: This

was a retrospective chart review. In seven ears of seven patients, the AM was simply attached over

the bony surface of the mastoid cavity without fibrin glue (AMG(-) group). In 22 ears of 20 other

patients, hyperdry AM (11 ears of 11 patients, AMG(+) group) or temporal fascia (11 ears of 9

patients, TFG(+) group) was attached over the bony surface of the mastoid cavity with fibrin glue.

Times for graft epithelization were compared among the three groups. Results: Complete

epithelization of the mastoid cavity took place in all patients in all three groups. The mean time to

complete epithelization of the graft in the AMG(-) and AMG(+) groups was significantly faster than

that in the TFG(+) group (p < 0.05) and was not significantly different between the two AM groups (p

> 0.05). © 2012 Informa Healthcare.