

Polyglycolic acid sheet attached with fibrin glue can facilitate faster epithelialization of the mastoid cavity after canal wall-down tympanoplasty.

Authors: Kobayashi T., Gyo K., Komori M., Hyodo M.

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Abstract:

Objective: This study retrospectively investigated whether polyglycolic acid (PGA) sheet attached to the bone surface using fibrin glue facilitate faster epithelialization of the mastoid bowl after canal wall-down (CWD) tympanoplasty compared to a simple dressing using poly-N-acetyl-glucosamine (Kichin) sheet. **Materials and Methods:** After completion of the CWD tympanoplasty, PGA sheet (n = 16, PGA group) with fibrin glue or Kichin sheet (n = 38, Kichin group) were placed on the bone surface of the mastoid bowl. **Results:** Postoperative epithelialization of the mastoid cavity was significantly ($p < 0.05$) faster in the PGA group than in the Kichin group (mean 135 versus 244 days, respectively). Use of the Kaplan-Meier method showed that only the short-term epithelialization rate (up to 100 days after operation) was significantly higher. No major adverse effects related to either procedure were seen. **Conclusion:** Epithelialization of the mastoid bowl after CWD tympanoplasty was faster in the postoperative short term when it was dressed with PGA sheet using fibrin glue compared with Kichin sheet.

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