# Abstract 64

## A COMPARISON OF TWO TECHNIQUES FOR MEDIUM-SIZED MACULAR HOLE SURGERY: INTERNAL LIMITING MEMBRANE PEELING VERSUS INVERTED INTERNAL LIMITING MEMBRANE FLAP TECHNIQUE

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Purpose: To compare the anatomical, morphological, and functional outcomes of the conventional internal limiting membrane (ILM) peeling versus inverted ILM flap technique for medium-sized (251-400 µ m) macular holes (MHs)

Forty-seven eyes of 47 consecutive patients who underwent ILM peeling (Group-1, 22 eyes) or inverted ILM flap technique (Group-2, 25 eyes) for primary medium-sized full-thickness MHs were included in this retrospective interventional study. The hole closure rate, best-corrected visual acuity (BCVA), and restoration of ellipsoid zone (EZ), external limiting membrane (ELM), and interdigitation zone (IZ) were analyzed at baseline and 6 months after surgery.

Hole closure was achieved in 20/22 (90.1%) cases of Group 1 and 25/25 (100%) cases of Group 2 (p= 0.012). The mean BCVA (logMAR) changed from 1.33 ± 0.42 to 0.87 ± 0.53 logMAR in Group 1 and from 1.19 ± 0.20 to 0.82 ± 0.41 logMAR in Group 2 at 6 months (p< 0.001 in both cases). The postoperative restoration rates were 90.1% and 96.0% for ELM (p=0.257), 54.5% and 60.0% for EZ (p=0.452), and 9.1% and 12.0% for IZ (p=0.695) in the two groups.

The study results suggested that the primary closure for medium-sized MHs was significantly superior in the inverted flap group than in the ILM peeling group. However, postoperative restoration of the outer retinal layers and BCVA were comparable between the techniques.