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COMPARISON OF THE RESULTS OF CLASSIC INVERTED INTERNAL LIMITING MEMBRANE FLAP AND SUPERIOR INVERTED INTERNAL LIMITING MEMBRANE FLAP TECHNIQUE IN LARGE STAGE IV IDIOPATHIC MACULAR HOLE SURGERY

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Introduction:

To compare the results of the classic inverted internal limiting (ILM) membrane flap and the superior inverted ILM flap technique in large stage IV idiopathic macular hole (MH) surgery.

Materials and methods:

In this retrospective comparative interventional study, a total of 47 patients (14 males and 33 females) who had undergone large stage IV idiopathic MH surgery were evaluated. Participants were classified as Group 1 (25 eyes), those who underwent the classic inverted ILM flap technique, and Group 2 (22 eyes), who underwent the superior inverted ILM flap technique. The patients' age, initial best-corrected visual acuity (BCVA), postoperative 3rd and 6th month BCVA, minimum MH diameter, MH base diameter, preoperative and postoperative ellipsoid zone (EZ) diameter, and preoperative and postoperative external limiting membrane (ELM) diameter were recorded. The data of Group 1 and Group 2 were compared.

Results:

The mean age was 63.7 in Group 1 and 65.1 in Group 2. There was no statistically significant difference in initial BCVA, final BCVA, minimum MH diameter, MH base diameter, preoperative and postoperative EZ diameter between Groups 1 and 2 ($p > 0.05$). Closure of the large stage IV idiopathic MH was observed in all cases in Group 1 and in all cases except one case in Group 2. In a case in Group 2 whose MH did not close after the first surgery, it was observed that the MH was completely closed after the ILM flap revision performed 3 months later. Epiretinal membrane developed in the postoperative period in 5 cases (20%) in Group 2.

Conclusions:

The results of the classic inverted ILM flap technique and the superior inverted ILM flap technique are similar in the repair of large stage IV MHs. Both ILM flap techniques can be applied in the repair of large stage IV MHs.