

Use of Delicate Maculorhexis During Macular Hole Surgery

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Advantages:

We elaborated the modification of maculorhexis to decrease surgical trauma. It consists of the removal of ILM around the macular hole, except the sector of preferred retinal locus (PRL). Preoperative microperimetry (fundus-related perimetry) allowed us to localize the PRL at the same time with evaluation of macular sensitivity.

Methods:

We examined 11 patients (11 eyes) with full thickness macular holes, with macular detachment of vitreous body ranging from 3 to 6 months. ILM was removed on $\frac{3}{4}$ round the macular hole, except the sector with fixation patterns.

Effectiveness / Safety:

Macular hole closure was achieved in 91% (10 patients). So we can conclude that delicate maculorhexis around $\frac{3}{4}$ of macular hole diameter didn't decrease the anatomical result of surgery. The optical coherence tomography performed 1, 3 and 6 months after the surgery revealed an increase in the retinal thickness of about 15-20 μm at the zone of kept ILM. Analysis of visual acuity dynamics before and after surgery showed that it was improved in all cases of total macular hole healing.