

Our way in surgery of epiretinal membranes

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Advantages:

Epiretinal membrane (EM) surgery is the most developing part of vitreoretinal surgery. Advantage of our method is complete removal of epiretinal membranes and internal limiting membrane (ILM). Removing of ILM is thought to prevent membrane recurrences.

Methods:

We perform standard 20-G vitrectomy with complete vitreous removal. EM and ILM are stained using of trypan blue (TB). Infusion line is stopped for this time. After removing TB from the site of elevated ILM we performed peeling of ILM together with EM. This method allows removing completely both, ILM and EM.

Effectiveness / Safety:

This technique was performed on 57 eyes of 57 subjects (21 men, 36 women). Mean age of subject in our study was 68 years. Preoperatively we diagnosed thick EM with corresponding edema of neuroretina in all subjects. Observation period was 13 months. Best-corrected visual acuity (BCVA) was measured on ETDRS charts in logMAR units. Mean BCVA before surgery was 0.76 logMAR (20/125). Mean BCVA after surgery was 0.40 (20/50). BCVA improved during follow-up by 4 ETDRS lines (20 letters), which was statistically highly significant. Main complications after surgery were temporary elevation of intraocular pressure (14 %), cataract progression in phakic eyes (44 %), retinal detachment (3 %). We did not see any case of endophthalmitis.

Take home message:

Peeling of ILM in EM surgery is save procedure that leads to improvement of BCVA and prevents EM recurrences.