Comment on: Anatomical and functional outcomes one year after vitrectomy and retinal massage for large macular holes

Dear Editor,

I read with interest the article by Chakraborty, *et al*.[1] on retinal massage for large macular holes. I have been using this method for the past two decades in recurrent or large macular holes but with a few differences as follows:

1. The internal limiting membrane (ILM) peel area is about one and a half disc diameter to avoid damage to the retina as the ILM is the condensation of the foot processes of the Muller cells and a large area of disruption could be deleterious to macular health.
2. The instrument used for retinal massage is an old Tano diamond-dusted membrane scraper (DDMS) to get a better grip for approximation and stretch of the macular tissue toward the hole.
3. This procedure is performed in a fluid-filled eye as massaging the retina under air would lead to more trauma to the neurosensory retina and retinal pigment epithelium (RPE) leading to RPE tracts and pressure atrophy.
4. The massage makes the retinal tissue more pliable and flexible, and it slides toward the hole closing it. As in an idiopathic hole [Fig. 1], there is no loss of actual retinal tissue and a microhole is stretched open by the posterior

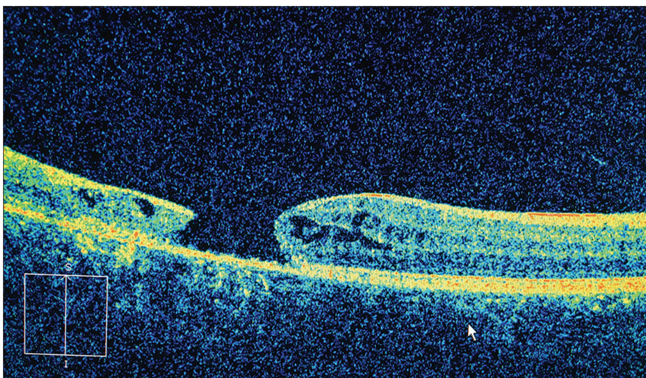

Figure 1: Preoperative OCT (optical coherence tomography) of large chronic macular hole

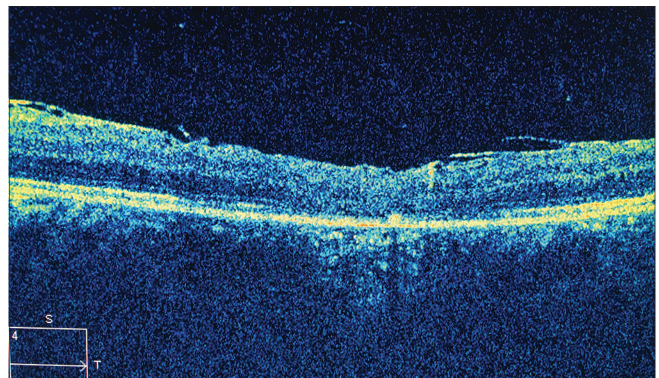

Figure 2: Postoperative OCT (optical coherence tomography) of post macular massage hole closure

hyaloid phase stuck to it with a localized proliferative vitreoretinoptathy.

5. My technique of massage is done starting from within the arcades in a centripetal fashion radially toward the macular hole in every clock hour using a blunt DDMS. This manages to get a fold of the extraretinal tissue that is used to approximate the hole edges and co-opt them making it a thin slit or a bunched-up frill.
6. Fluid Gas Exchange (FGE) is done as the last stage with the fluid drained initially over the disc and the last drop aspirated over the hole using a soft-tip flute needle with passive extrusion followed by C_3F_8 (perfluoropropane) gas injection. Silicone oil is a better tamponade in some of these cases as maintaining a prone position is very important to close these recurrent large holes.

Hence, retinal massage is a good technique to get a Type 1 true hole closure [Fig. 2] rather than using the ILM flap as a scaffold, which usually leads to a Type 2 closure with poor visual recovery. But in a subset of cases, retinal atrophy is seen in some areas with RPE tracts and poor visual recovery because of the trauma induced to the ellipsoid zone by the procedure. This procedure is very helpful and simple and can be performed even by amateur surgeons in difficult macular hole surgeries.

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Conflicts of interest

There are no conflicts of interest.

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Reference

1. Chakraborty D, Sengupta S, Mukherjee A, Majumdar S. Anatomical and functional outcomes one year after vitrectomy and retinal massage for large macular holes. Indian J Ophthalmol 2021;69:895-9.

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