Adaptive strategies for recurrent macular hole retinal detachment- Case report

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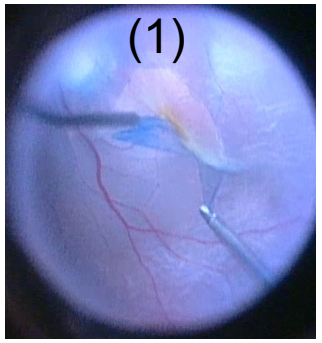
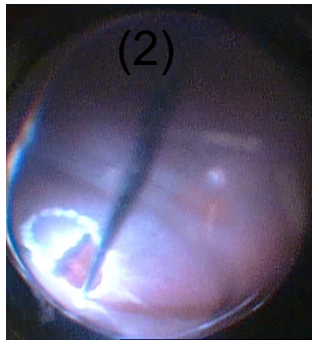
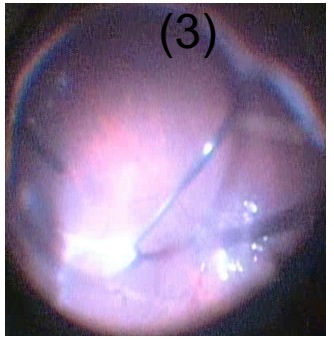
Background: Recurrent macular hole retinal detachment (MHRD) presents a significant challenge in vitreoretinal surgery, particularly in highly myopic eyes.[1] Various surgical strategies have been developed to address this issue,[1] focusing on techniques such as internal limiting membrane (ILM) peeling, inverted ILM flap techniques,[3] and the use of adjunctive materials like silicone oil tamponade,[2] human amniotic membrane (hAM) and autologous retinal grafts.[4]

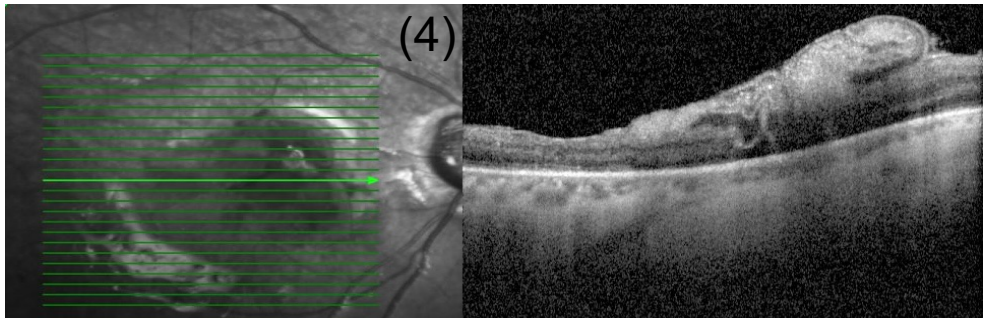
Case Report:

- 68 year-old male presented with macula-off temporal RD with preoperatively presumed single retinal tear and intraoperatively discovered macular hole prompted an ILM peel on the detached retina, anchored at the optic disc with cryo and gas tamponade. (1)
- Six weeks later, a temporal redetachment with a persistent macular hole necessitated another vitrectomy and silicon oil injection.
- At 3-month mark, silicon oil removal, inferior proliferative vitreoretinopathy (PVR) peel, phaco with intraocular lens (IOL) and air tamponade were performed, only for the retina to redetach with an open macular hole shortly after.
- A subsequent vitrectomy with retinectomy for inferior grade C PVR (2) and utilization of the retinectomy specimen under heavy liquid (3) effectively closed the chronic macular hole with laser to retinectomy site and silicon oil tamponade. The macular hole closed with retinal graft in place (4) and the retina successfully reattached after final silicone oil removal 3 month later.









Conclusion: This case demonstrates the importance of adaptability in surgical planning and the potential for innovative techniques in the treatment of complex MHRD, one of which is PVR retinectomy graft.

References:

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