

## Abstract 429

### UNLOCKING THE POTENTIAL OF TENON'S CAPSULE IN THE TREATMENT OF COMPLEX VITREORETINAL PATHOLOGIES

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#### Introduction:

Background and Purpose: In vitreoretinal surgery, transplantation of sealing materials such as ILM, capsular tissue, and amniotic membrane has been gaining popularity for the repair of complex macular holes or posterior tears where conventional methods prove inadequate. Among these innovative solutions, Tenon's capsule might be a promising and an accessible option for addressing complex vitreoretinal pathologies. Herein, we aim to describe a novel surgical technique utilizing an autologous tenon's capsule graft, in three cases of complex retinal detachments associated with infantile high myopic macular holes (MH) and Morning Glory Syndrome (MGS).

#### Materials and methods:

Methods: Tenon's capsule was exposed following conjunctival incision, separated from the episcleral tissue, and excised to appropriate sizes. The tenon grafts were then inserted through a sclerotomy, and positioned over the MH (2 eyes) and the excavation of the morning glory disc (1 eye). Silicone oil tamponade was performed at the end of the surgery in all cases.

#### Results:

Results: All cases achieved successful retinal reattachment and demonstrated stable integration of the Tenon's capsule grafts during follow-up. No signs of infection or inflammation were observed.

#### Conclusions:

Conclusion: Tenon's capsule transplantation emerges as a promising alternative sealing material in vitreoretinal surgery, offering potential advantages in terms of availability, stability, and efficacy. Further validation through larger studies across diverse retinal pathologies is warranted to ascertain its broader applicability and impact on visual function.

#### Sources:

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