

Case Report

## Pars-Plana Vitrectomy with Internal Limiting Membrane Peeling in Refractory Non-Tractional Cystoid Macular Edema: A Case Report

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### Background

Cystoid macular edema (CME) is defined as increased retinal thickness as a result of disruption of the blood retinal barrier causing leakage of fluid within the intercellular spaces of the retina [1], the role of Pars-Plana Vitrectomy (PPV) in treatment of non-tractional CME has been debatable yet, some studies stated it could be beneficial specially in cases of refractory macular edema.

### Case Presentation

A 28-year-old male patient, not diabetic nor hypertensive and with no history of any chronic or autoimmune disease. The patient presented with severe diminution of vision (CF 1m) OS and 20/20 vision OD. examination of the left eye revealed a picture of macular edema in an otherwise normal eye. Macular OCT OS showed a picture of cystoid macular edema (CME) with a central retinal thickness (CRT) of 1000+ micron with no signs of traction and an intact ellipsoid zone [2].

The patient received 5 of intra-vitreous injections anti-VEGF [2] (Bevacizumab) over a period of 5 months and showed signs of improvement after the first and second injections (with CRT of 800 and 700 microns respectively) but no further improvement over the last 3 injections. Vision improved to 6/120 after the first injection then 6/60 after the second with no further improvement with further injections.

The patient was prepared for pars-plana vitrectomy [3], and he was to be followed up for his VA and CRT over a period of 3 years. Surgery was performed with total vitrectomy, shaving of the vitreous base, Internal Limiting Membrane (ILM) peeling [4] and 360° laser. Within the first month VA improved to 6/18 with residual edema, 3 months post-operative VA was 6/9 with a dry macula. 6 months after the surgery the patient presented with upper RD with macula off and VA of HM and no retinal break could be visualized. Another PPV was performed, the retina was flattened, further 360° laser was performed, and the silicon oil was injected. 6 months later silicon was removed, and the patient had a stable BCVA of 6/9 for 3 years after the last surgery with no recurrence of macular edema.

### **Conclusion**

Despite the debate, PPV with ILM peeling in non-tractional macular edema could be of value for treating refractory non-tractional macular edema in selected cases.

### **References**

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