IJMPR 2023, 7(5), 17-17

International Journal of Modern Pharmaceutical Research

www.ijmpronline.com

ISSN: 2319-5878
IJMPR
Case Report

SJIF Impact Factor: 5.273

PARS-PLANA VITRECTOMY WITH INTERNAL LIMITING MEMBRANE PEELING IN REFRACTORY NON-TRACTIONAL CYSTOID MACULAR EDEMA: A CASE REPORT

Yasser A. Mohamed*

Dar El-Oyoun Eye Hospitals, Egypt.

Received on: 11/03/2023

Revised on: 01/04/2023

Accepted on: 22/04/2023

***Corresponding Author**

Yasser A. Mohamed

Dar El-Oyoun Eye Hospitals, Egypt.

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 years 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 reveled 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-vitreal 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

1. Gass JD, Norton EW. Follow-up study of cystoid macular edema following cataract extraction.Trans Am Acad Ophthalmol Otolaryngol., 1969; 73: 665-682.
2. Chan A, Duker JS, Ko TH, Fujimoto JG, Schuman JS. Normal macular thickness measurements in healthy eyes using Stratus optical coherence tomography. Arch Ophthalmol., 2006; 124(2): 193-198. doi:10.1001/archopht.124.2.193.
3. Wallsh JO, Gallemore RP. Anti-VEGF-Resistant Retinal Diseases: A Review of the Latest Treatment Options. Cells. 2021; 10(5): 1049. Published 2021 Apr 29. doi:10.3390/cells10051049.
4. Machemer R, Buettner H, Norton EW, Parel JM. Vitrectomy: A pars plana approach. Trans Am Acad Ophthalmol Otolaryngol., 1971; 75: 813-20.
5. Yannuzzi NA, Callaway NF, Sridhar J, Smiddy WE. INTERNAL LIMITING MEMBRANE PEELING DURING PARS PLANA VITRECTOMY FOR RHEGMATOGENOUS RETINAL DETACHMENT: Cost Analysis, Review of the Literature, and Meta-analysis. Retina. 2018; 38(10): 2081-2087. doi:10.1097/IAE.0000000000002248.