Management of a case with Optic Disc Pit and Serous Maculopathy

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Abstract:

Optic Disc Pit (ODP) is an excavation of the optic disc, usually unilateral. It is congenital and most commonly located on the inferotemporal quadrant or central portion of the disc and can lead to serous retinal detachments, normally found at the macula. In this case we present the clinical characteristics of an optic disc pit maculopathy and his surgical management.

Case Report:

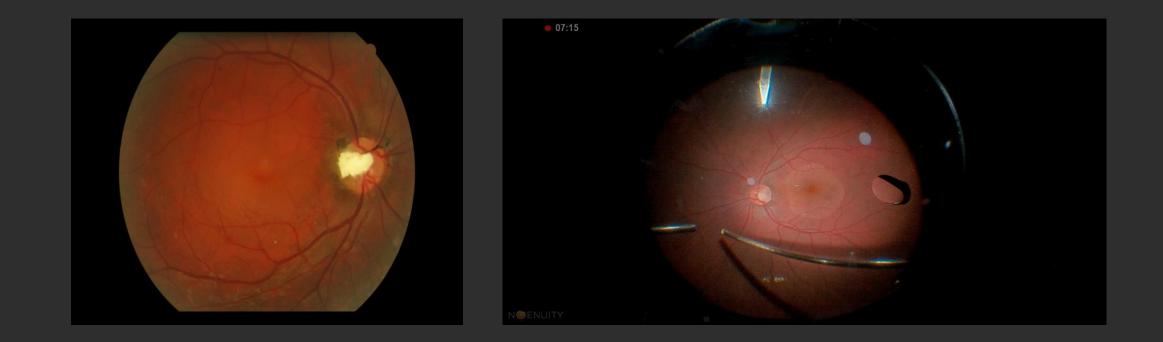
A 27-year-old male presented with progressive deterioration of his Visual Acuity (VA) in his Right Eye (RE) 1 month before examination. He was treated with tablets of Acetazolamide 1x3 . Best Corrected VA (BCVA) was 1/10 and 10/10 with the RE and LE respectively. His Intraocular Pressure (IOP) was 15/16 mmHg. Slit lamp examination of the anterior segment was unremarkable in both eyes. Fundoscopy revealed a temporal ODP in his RE. At this time the patient was diagnosed with a serous retinal detachment secondary to ODP. Left fundus was normal. Optical Coherence Tomography (OCT) confirmed the presence of sub-retinal fluid (SRF) and a macular thickness of 596µm in the RE.

Treatment/Management:

Due to the significant size of the detachment the patient was advised for a PPV surgery.



He underwent 25G pars plana vitrectomy (PPV) combined with internal limiting membrane (ILM) peel. A scleral graft was placed in the optic disc pit and 2,5ml SF6 gas was used to tamponade.

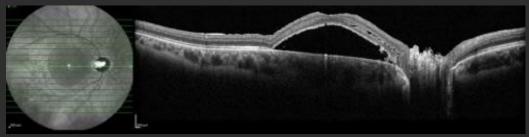




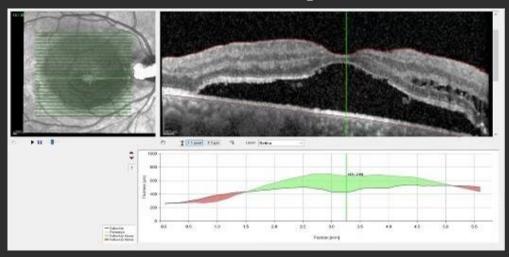
Pre - op

Post - op









Fifteen days post-operation, his BCVA in the RE was 2/10+ and the IOP was 16mmHg. The SRF and the macular thickness (433µm) had decreased. On his last visit, BCVA was 6/10 in the RE with an IOP of 11mmHg . The OCT revealed a slight increase in SRF and the patient was prescribed anti-inflammatory drops twice daily.

Conclusions:

Favorable anatomic and functional results have been noted after the surgery. P<u>atient's VA was improved</u> by 50%<u>. However</u>, he will be under follow up every 4 months, due to viscosity of the SRF, that makes its absorption very slow. The above surgical method, PPV and ILM peel along with the use of a scleral graft in the ODP, seems to eliminate the accumulation of SRF, improving the ODP-M and the patient's VA.



Moisseiev E, Moisseiev J, Loewenstein A. Optic disc pit maculopathy: when and how to treat? A review of the pathogenesis and treatment options. Int J Retina Vitreous. 2015;1:13. Published 2015 Aug 7. doi:10.1186/s40942-015-

[•] Orazbekov L, Bayanova A, Dauletbekov D. Surgical Treatment of Optic Disc Pit Associated with Macular Detachment. Case Rep Ophthalmol. 2022;13(3):829-833. Published 2022 Nov 10. doi:10.1159/000527050