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Acquired Optic Disc Pit Maculopathy treated with Vitrectomy: a case series

Ahmed Dawood MD FRCS [1], Ahmed Saad MD FRCOphth FRCS CrtLRS [2]

1 Clinical Fellow, The James Cook University Hospital, UK
2 Vitreoretinal Consultant, The James Cook University Hospital, UK

South Tees Hospitals NHS
NHS Foundation Trust
The James Cook University Hospital

Introduction

Acquired optic nerve pit is a rare condition, often associated with glaucoma.[1] It may cause macular oedema, schisis or serous detachment. Diagnosis of optic disc pit maculopathy (ODPM) can be challenging. Modalities for management include observation, Juxtapapillary barrage laser, and vitrectomy.[2]

Aim

We present a series of three cases with macular oedema due to acquired optic disc pit from glaucomatous cupping.

Methods

Two cases were treated with pars plana vitrectomy (PPV), internal limiting membrane (ILM) peel and gas tamponade C3F8; One was only observed. The outcome measures used for follow-up were best-corrected visual acuity (BCVA) and optical coherence tomography (OCT).

Results

The mean age was 67 years. All patients had an established diagnosis and treatment for glaucoma, with no history of congenital optic disc pits.

Case 1

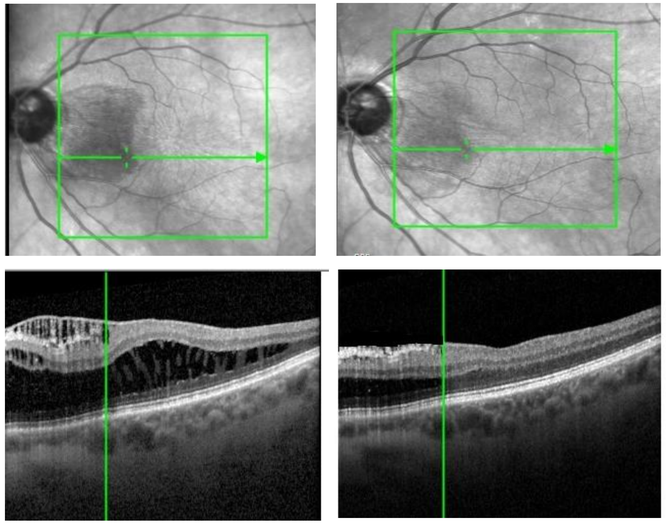
BCVA improved from 6/36 to 6/12 + significant improvement in OCT.

Case 2

BCVA improved from 6/24 to 6/9 + significant improvement in OCT.

Case 3

BCVA 6/12, patient was mildly symptomatic - Both BCVA and OCT remained stable after 6 months.



Before (left) and after (right) PPV

Discussion & Conclusion

- In glaucoma patients, if unexplained macular oedema or submacular fluid develops, acquired optic pit should be suspected. OCT is used to visualise the tract connecting the optic pit to the macular fluid.
- PPV can lead to good anatomical and functional outcomes.
- The exact pathogenetic mechanism remains not fully understood, however the improvement after vitrectomy is appropriate with the role of vitreous traction in the progression of macular detachment .[3]
- ILM peeling ensures total removal of the vitreous gel and further improves final surgical outcome. [2]
- Though treatment for ODPM is warranted in the majority of cases for gradual visual deterioration, observation may be recommended in asymptomatic patients.

References

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