

Spontaneous Improvement in Optic Disc Pit Maculopathy (ODP-M)

Ah-See KL¹, Singh J¹

¹: Princess Alexandra Eye Pavilion, Edinburgh, UK

Background

- Optic disc pits are rare congenital abnormalities of the optic disc
- Some cases are complicated by maculopathy
- The exact source of macular fluid remains unknown
- There is no consensus on the optimal treatment of symptomatic patients

Proposed sources of macular fluid in ODP-M

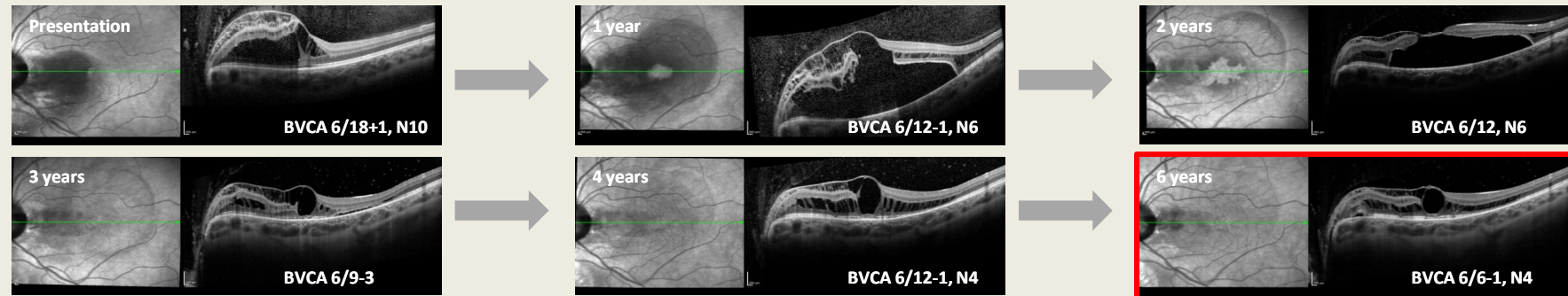
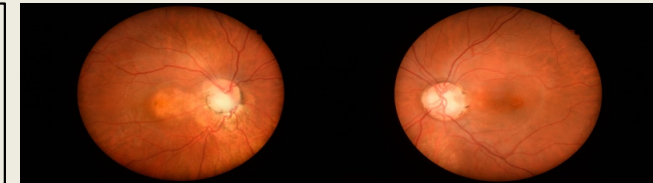
- Vitreous
- Subarachnoid space (ie. CSF)
- Vascular leakage (1).

Described surgical options in ODP-M

- Pars plana vitrectomy
- Retinal endolaser
- Gas tamponade
- ILM peel ILM flaps

Case description

- A 22-year-old woman presented with decreased left eye vision from 6/5 Snellen to 6/18+1 secondary to ODP-M.
- Best corrected acuity (BCVA) in the fellow eye was 6/36 due to amblyopia and optic disc coloboma (see fundus photographs)
- Surgical options were discussed with the patient, but she elected for conservative management with observation
- Serial optic coherence tomography (OCT) images demonstrate fluctuations in the subretinal and intraretinal fluid over six years
- Spontaneous improvement of the macular architecture was observed and BCVA reached 6/6-1



Conclusion

- Spontaneous resolution of optic disc pit maculopathy may be rare (2) and previous studies have suggested the final visual outcome may be poorer in such cases (3)
- However, the mechanism by which surgical measures lead to improved vision is incompletely understood
- This patient achieved excellent visual acuity despite some persistent abnormality of the macular architecture with conservative management

References

1. 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 Retin Vitr2015, 1:13.
2. Wan, R. and Chang, A., Optic disc pit maculopathy: a review of diagnosis and treatment. Clin Exp Optom 2020, 103: 425-429.
3. Sobol WM, Blodi CF, Folk JC, Weingeist TA. Long-term visual outcome in patients with optic nerve pit and serous retinal detachment of the macula. Ophthalmology 1990 97(11):1539-1542.

Email kah-see@nhs.scot