# Retinal detachment due to a macular hole in a patient with Behçet disease treated with vitrectomy and silicone oil tamponade

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PURPOSE. A rare case of unilateral retinal detachment due to a macular hole in a patient with Behçet disease is presented.

METHODS. Interventional case report.

RESULTS. A 31-year-old man with a 6-year history of Behçet disease presented with a relapse in his disease and received infliximab. Ten days later, as the inflammation subsided, a retinal detachment caused by a macular hole was diagnosed. The patient underwent vitrectomy surgery with internal limiting membrane peeling and silicone oil tamponade. Seven months after the removal of the silicone oil, the macular hole remained closed and the retina attached. Optical coherence tomography was performed before surgery and during the postoperative follow-up period.

CONCLUSIONS. Behçet disease could be rarely associated with retinal detachment caused by a macular hole. Macular traction caused by severe recurrent vitritis in combination with the retinochoroidal atrophy due to the relapsing retinitis might be the underlying mechanism of this complication, which to the authors' knowledge has never been reported before. (Eur J Ophthalmol 2008; 18: 1023-4)

KEY WORDS. Behçet disease, Retinal detachment, Macular hole

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## INTRODUCTION

Behçet disease is a chronic, recurrent disease of unknown origin characterized by oral and genital ulcers, skin lesions, and ocular involvement (1). Both segments of the eye can be affected. Posterior segment manifestations include uveitis, occlusive vasculitis, and severe optic nerve neuropathy (1, 2). Full-thickness macular hole (FTMH) formation has been rarely reported (3, 4) in the literature, and in all reported cases conservative management was undertaken (3, 4).

We report a case with retinal detachment due to a macular hole (MHRD) in a patient with Behçet disease and describe its course after vitrectomy with internal limiting membrane (ILM) peeling and silicone oil tamponade.

## Case report

A 31-year-old man, diagnosed with Behçet disease 6 years earlier, was referred to us from the uveitis clinic. Ten days earlier, he had experienced a relapse in his disease and a single dose of infliximab (IV 5 mg/kg) was administered. The inflammation subsided; however, his vision did not improve. On examination, best-corrected visual-acuity (BCVA), previously reported at 6/6 left eye (LE) without correction, was light perception. Anterior chamber (AC) biomicroscopy revealed AC cells +2. Funduscopy revealed vitreous cells and a retinal detachment; 360 scleral indentation failed to reveal any peripheral tears but careful examination with 78-D lens disclosed a FTMH. Optical coherence tomography (OCT) confirmed the above findings and revealed a vitreous at-



Fig. 1 - Before surgery optical coherence tomography demonstrates retinal detachment with a full-thickness macular hole. Vitreous is attached on the detached retina, which is edematous and has cystic changes.

#### tachment to the fovea (Fig. 1).

The patient underwent a 20-gauge pars plana vitrectomy during which complete induction of posterior vitreous detachment (PVD) was performed with difficulty, as the vitreous was firmly attached on the detached retina. Subsequently, internal limiting membrane (ILM) peeling was performed and the retina was flattened through a peripheral drainage retinotomy. Silicone oil (5000 centistokes) tamponade was used and the patient was instructed to keep prone positioning for 7 days.

One month postoperatively, the FTMH was closed, the retina was attached under oil, and BCVA improved to 6/36. Six months later, the patient underwent silicone oil removal. Seven months after the removal of silicone oil, the FTMH remained closed, the retina was attached, and BCVA improved to 6/18 (Fig. 2).

# DISCUSSION

Macular hole complicating Behçet disease has been rarely reported (3, 4). In all reported cases conservative management was undertaken and in none of them did the FTMH associate with RD (3, 4).

MHRD is a rare event, described mainly in high myopes with posterior staphyloma (5). Vitrectomy surgery and ILM peeling with gas or silicone oil tamponade is most commonly used to treat MHRD (5).

We postulate that in our 31-year-old patient, the traction caused by severe recurrent vitritis in combination with the retinochoroidal atrophy due to the relapsing retinitis led to the development of the MHRD. Vitrectomy surgery and ILM peeling relieved the traction around the fovea and facilitated the reattachment of the retina and the closure of the macular hole.



**Fig. 2** - Seven months after the removal of silicone oil optical coherence tomography demonstrates a thin but attached retina and a closed macular hole.

After the silicone oil removal, the MH remained closed, the retina attached, and VA improved to 6/18. During the follow-up period, no relapses of the disease occurred.

Our case illustrates the rare but possible association of Behçet disease with retinal detachment caused by macular hole which to our knowledge has never been reported before. This favorable outcome strengthens the view that vitrectomy may be of benefit in patients with Behçet disease and complex vitreoretinal problems.

#### Proprietary interest: None.

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