Efficacy of switching to adalimumab in a patient with refractory uveitis of Behçet's disease to infliximab

Sirs,

Ocular involvement is a very common manifestation of Behçet's disease (BD) and recurrent attacks of eye inflammation result in structural changes leading to loss of vision if left untreated. Anti-TNF-α agents have shown a rapid and effective suppression of ocular manifestations of BD, especially in cases refractory to conventional treatment with immunosuppressive drugs (1-10). We describe a case of a patient suffering from BD with severe ocular involvement refractory to corticosteroid, cyclosporine and infliximab combination therapy and successfully treated with adalimumab. A 26-year-old man with BD came to the outpatient clinic of the Rheumatology Department of Lucania in September 2006. The disease had begun one year before with recurrent oral aphtosis and papulopustular skin lesions. In June 2006, genital ulcers and posterior uveitis involving the right eye had appeared. He had been treated with oral prednisone (25 mg/day), topical steroids, and mydriatic agents with partial benefits. Two weeks before our first evaluation, tapering of the prednisone dose resulted in a relapse of retinitis in the right eye. At admission, examination showed diffuse papulopustular lesions. Slit-lamp and fundus examinations were suggestive for retinal vasculitis of the right eye. Visual acuity was 1/10. The remainder of the general examination was unremarkable and HLA typing was positive for the B51 antigen. The pathergy test was negative. In October 2006, after obtaining the patient's informed consent, we began infliximab therapy (5mg/kg) at weeks 0, 2 and 6 with associated prednisone maintenance treatment (25 mg/day). Since retinitis relapsed, the fourth infusion was anticipated by a month with some improvement. In March 2007, despite the combination treatment with infliximab and prednisone (25mg/daily), a relapse of retinitis in the right eye occurred. Cyclosporine was added (3 mg/kg/daily) and infliximab was administrated every 6 weeks. Prednisone was slowly tapered to 10 mg/day . In August 2007, following a further ocular relapse, steroid dose was increased (25 mg/day) and, in addition to cyclosporine (3mg/kg/day), we decided to switch to adalimumab at a dose of 40 mg every other week subcutaneously. Fluorescein angiography (Fig. 1A) showed a hyperfluorescent optic disk and diffuse irregular mottled retinal hyperfluorescence in the right eye. At the time of the fifth injection, the patient had a complete remission of all signs and symptoms and after three months of adalimumab treatment, visual acuity was 9/10 and fluorescein angiography showed a normal optic disk (Fig. 1B). The dose of prednisone and cyclosporine was progressively reduced and definitively stopped. The disease has remained in complete remission for 2 and half years during which the patient was continued to take adalimumab.

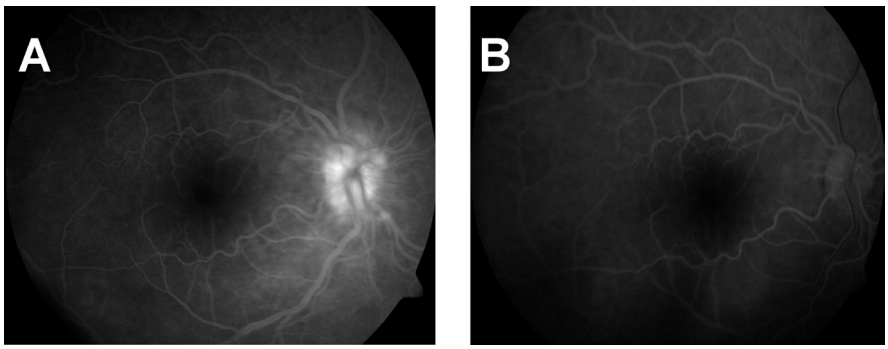

Fig. 1. A. Before adalimumab treatment. Fluorescein angiography shows hyperfluorescence of optic disk. **B.** After three months of adalimumab treatment. Fluorescein angiography shows a normal optic disk.

Anti-TNF-α therapy has improved the management of BD. The most widely studied anti-TNF-α agent in BD is infliximab which has been suggested by the EULAR recommendations for the management of the majority of clinical manifestations unresponsive to traditional drugs (8).

Adalimumab, which has been licensed several years after infliximab, has been shown to be equally effective in BD by recent case studies (5, 9, 10). The drug has especially been used in patients who had an insufficient response or did not tolerate infliximab. Takase and co-workers successfully treated with adalimumab a patient with BD showing severe uveitis who had previously been treated with infliximab (10). Infliximab, which had been able to give a clinical remission after the failure of cyclosporine, had been withdrawn due to infusion reactions. Regarding the present case, at the time of our evaluation no recommendations on the use of anti-TNF-α in BD were available so we decided to use infliximab as a first-line therapy in this recent onset BD-uveitis with the aim to lead a rapid suppression of ocular inflammation. Unfortunately, the drug failed in preventing ocular relapses, maintaining visual acuity and the ability to taper steroid therapy despite the combination treatment with cyclosporine. Our case report suggests that switching to adalimumab can also work in patients with severe uveitis who do not respond to infliximab.

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