Case Report

Successful Treatment of Severe Behçet's Disease with Infliximab in an Italian Olympic Athlete

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ABSTRACT. An Italian Olympic athlete with a severe form of Behçet's disease was given infliximab. He had oral aphthosis, papulopustular and follicular lesions, and a bilateral cystoid macular edema. After the first 3 infusions, the mucocutaneous lesions disappeared and cystoid macular edema was much improved. Cyclosporine was stopped and the prednisone dose was progressively tapered until the cystoid macular edema disappeared. (J Rheumatol 2008;35:930–2)

Key Indexing Terms:
BEHÇET'S DISEASE INFLIXIMAB ANTI-TUMOR NECROSIS FACTOR-α INHIBITORS

Behçet's disease (BD) is a multisystem inflammatory disorder characterized by recurrent oral ulcers, genital ulcers, skin lesions, and ocular inflammation. It can also involve the central nervous system, the large vessels, the gastrointestinal tract, and the joints. The course of the disease is variable. However, it has been found that morbidity and mortality related to eye, vascular, and neurologic involvement are higher in male and young patients than in female and elderly patients[1,2]. The treatment of BD remains largely empirical and is based on immunosuppressives. Recently, the tumor necrosis factor-α (TNF-α) blockers have provided additional tools for treatment of recalcitrant disease[3-12]. We treated an Italian Olympic athlete who had a severe form of BD with infliximab. He had a complete drug-induced remission and was able to return to competition.

CASE REPORT

A 29-year-old athlete had missed the Olympic Games in Athens in 2004 because he had fallen ill with BD. His disease started in the autumn of 2003 with recurrent oral aphthosis, folliculitis, papulopustolosis, and fever. In the following months, epididymitis and erythema nodosum appeared. In February 2004, he had papilledema, and 2 months later a deep venous thrombosis involving the right saphena. In April 2004, he also developed bilateral posterior uveitis and was given azathioprine 2.5 mg/kg/day and prednisone 25 mg/day in a Northern Italian rheumatologic center. In November 2004, he presented to the Rheumatology Department of Lucania. He had oral aphthosis, papulopustular and follicular lesions, and a bilateral cystoid macular edema, more severe in the left eye (Figure 1A). His visual acuity was 6/10 in the right eye and only 2/10 in the left. HLA typing disclosed the B51 antigen. We gave him 3 pulses of methylprednisolone 500 mg on alternate days and added cyclosporine 3 mg/kg/day to azathioprine. After 1 month, he returned with a 50% improvement of cystoid macular edema. The mucocutaneous lesions were still present. With his informed consent, we began intravenous infliximab therapy at a dose of 5 mg/kg at Weeks 0, 2, and 6 and every 2 months subsequently. Cystoid macular edema was present in both eyes and visual acuity was 7/10 in the right eye and 4/10 in the left. After the first 3 infusions, the mucocutaneous lesions disappeared and cystoid macular edema was much improved. His visual acuity was 10/10 in the right eye and 8/10 in the left. Cyclosporine was stopped and azathioprine was reduced to 0.7 mg/kg/day. This latter drug was maintained with the intention of reducing the immunogenicity of infliximab treatment and because there is no evidence for the efficacy of longterm infliximab monotherapy in BD uveitis[11].

The prednisone dose was progressively tapered, and stopped in May 2005 when cystoid macular edema disappeared (Figure 1B). The disease remained in remission and in January 2006 he was taking part in competition again. The disease remains in complete remission with an infusion of infliximab every 8 weeks and 0.7 mg/kg/day azathioprine as a measure to limit the development of antibodies to infliximab.

DISCUSSION

The aim of treatment of BD is the suppression of inflammation. Immunosuppressive agents are given to patients with severe symptoms and risk factors for an unfavorable disease progression. Young male patients are at increased risk of developing systemic complications carrying significant morbidity and mortality[1,2]. Anti-TNF-α agents have recently been shown to be effective treatment for serious manifestations of BD including retinal vasculitis and central nervous system involvement[3-12]. The results of infliximab therapy were particularly important in our patient to permit him to take part in athletic competitions. He has had longlasting remission with a 2.5 year duration of therapy with infliximab and azathioprine.

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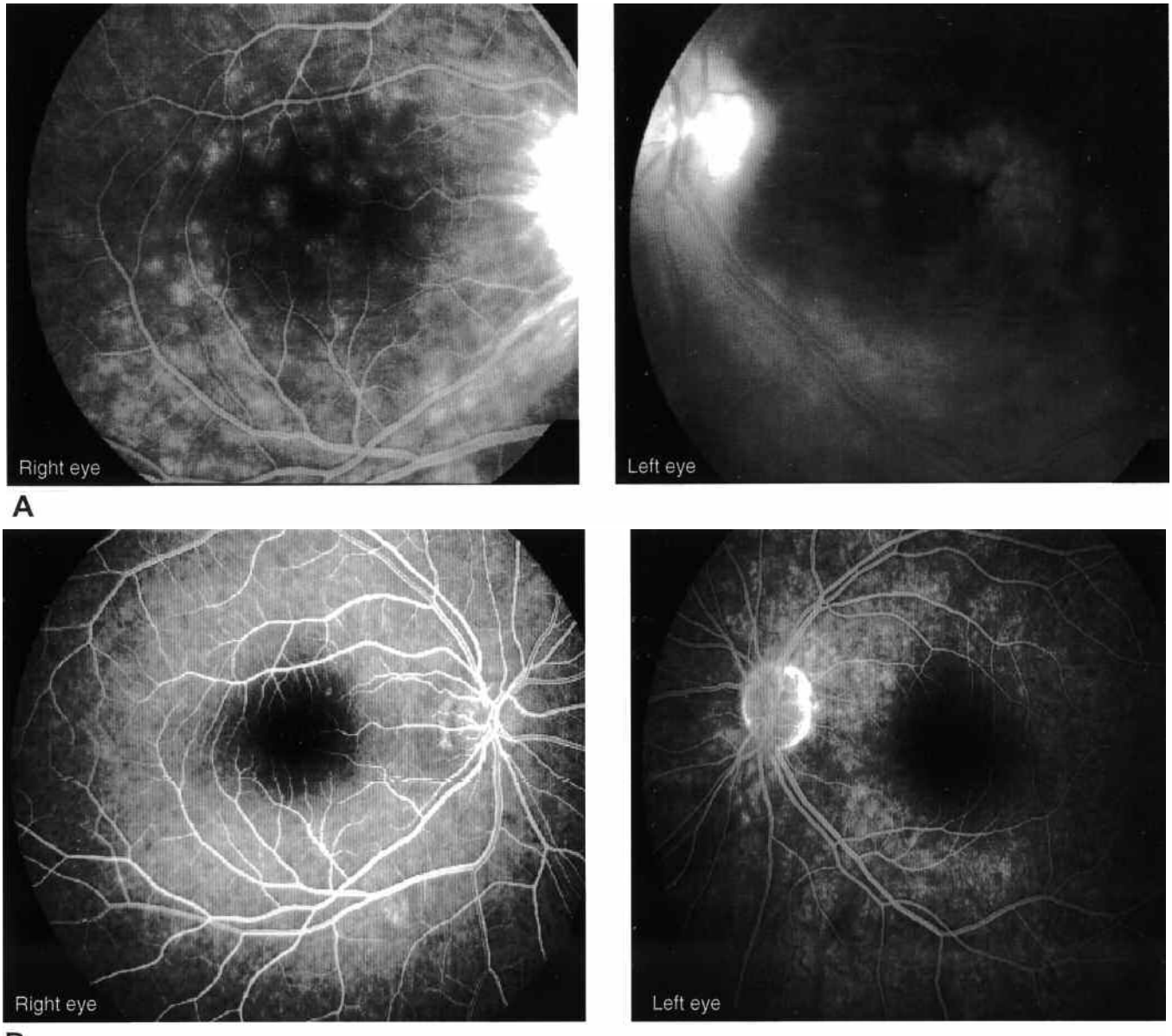

Figure 1. A. Fluorescein angiography performed in November 2004, showing swelling of the optic disc, cystoid macular edema, and leakage of retinal vessels. B. Fluorescein angiography in May 2005 shows complete disappearance of the findings.

A relapse of the disease is probable after stopping infliximab therapy. On the other hand, longterm use of the drug can result in side effects or drug resistance due to development of antichimeric antibodies to infliximab. Possible actions to reduce the risk of these events include decrease of the dosage of infliximab, or switching to the promising human monoclonal antibody adalimumab.

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