The efficacy of a single dose of infliximab in the treatment of Behçet's disease uveitis

Sirs,

Behçet's disease (BD) is a chronic condition characterized by recurrent oral and genital ulcers, skin lesions, uveitis, arthritis and venous and arterial thrombosis (1). Anterior and posterior uveitis are the most common ocular manifestations that may lead to blindness in many patients (2). In this study, we report the efficacy and safety of a single dose of 5mg/kg of infliximab in five patients with recurrent posterior uveitis of BD. The patients were enrolled in this 4-week open label prospective trial after stopping all their immunosuppressants except prednisone. Ophthalmologic assessment included visual acuity, density of inflammatory cells (3,4) and fluorescein angiography. The assessment was preformed by the same ophthalmologist every other day for the first week and then weekly until the end of the study.

All patients were males, mean age 29.6 years (range 21-42 years) and mean disease duration of 7.4 years (range 4-11 years). All had received at least one immunosuppressant in the past for the treatment of uveitis (mean 2, range 1-4). Two patients had monocular vision. All eyes had vitreous inflammation ranging from 2+ to 4+ and 6/8 eyes had anterior chamber inflammation ranging from 2+ to 4+. Patient 4 had multiple atrophic retinal scars in the right eye. Patient 5 had serous macular detachment in the left eye associated with choroidal and retinal hypoperfusion on Fluorescein angiography. The average dose of prednisone at entry was 50 mg/day (range 20-80 mg). All patients received infliximab within 7 days of relapse of eye disease.

By day 2 after treatment (Table I), inflammation in the anterior chamber improved in 4/6 eyes and vitirits decreased in 7/8 eyes. By week 4, anterior chamber cells disappeared in all affected eyes and vitritis subsided in all eyes. No change was seen in the retinal scars of patient 4. The left eye of patient 5 which showed choroidal and retinal capillary non-perfusion had complete resorption of the serous macular detachment by day 2 with gradual improvement in the perfusion over 7 days. Prednisone dose was reduced to an average of 40 mg/day (range 15-65 mg) by the end of the study. No side effects were noted in any of the patients.

Patients were followed up for a mean of 9.8 months. Patient 1 remained in remission on no medications for 14 months after which he had recurrent posterior uveitis. He was treated with infliximab with rapid resolution of his symptoms. Patient 2 had flare-up of his posterior uveitis while on prednisone 15 mg/day after 13 months and was advised to increase his steroids but was lost to follow-up. Patient 3 had relapse of his posterior uveitis at 18 months while on 5 mg/day of prednisone and was treated with prednisone and methotrexate. Patient 4 had recurrence of posterior uveitis at 2 months of follow-up. He was started on prednisone, methotrexate and leflunomide but was lost to follow-up. Patient 5 developed traction retinal detachment involving the left fovea 2 months after study entry. He underwent vitrectomy and was started on prednisone and methotrexate. Since then his vision stabilized and he is continuing on a tapering dose of prednisone. The right eye remained 20/200 throughout the follow-up.

In our study, we observed a rapid and significant improvement in anterior and posterior chamber inflammatory cells in all of our patients. Our results are similar to those reported by others (5,6) who showed rapid control of eye inflammation and significant decrease in ocular attacks in patients treated with one or more doses of infliximab. Interestingly, 3/5 of our patients remained free of vitritis for more than one year suggesting individual variability in long term response to treatment in this patient population.

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Table I. Changes in anterior and posterior chamber inflammation and visual acuity during infliximab treatment.

Patient/affected eye	Visual Acuity				Cells in anterior chamber				Vitritis			
	Baseline	Day 2	Week 1	Week 4	Baseline	Day 2	Week 1	Week 4	Baseline	Day 2	Week 1	Week 4
Patient 1												
Right	20 / 50	20/50	20 / 30	20 / 30 +	3+	3+	0	0	2+	0	0	0
Left	NLP	-	-	-	-	-	-	-	-	-	-	-
Patient 2												
Right	HM	HM	HM	CF 1	4+	1+	0	0	2+	1+	1+	0
Left	CF 1	CF1	CF 3	CF 3	4+	1+	0	0	2+	1+	1+	0
Patient 3												
Right	CF 0.5	CF 0.5	CF 1	CF 1	0	0	0	0	4+	0+	0	0
Left	CF 6	20/100	20/70	20 / 30	0	0	0	0	4+	0+	0	0
Patient 4												
Right	CF 1	CF 1	CF 1	CF 1.5	2+	2+	2+	0	2+	2+	1+	0
Left	NLP	-	-	-	-	-	-	-	-	-	-	-
Patient 5												
Right	CF 2	20/ 200	20/200	20/200	4+	0+	0	0	1+	0	0	0
Left	CF 2	CF 2	CF 2	20/200	4+	0+	0	0	1+	0	0	0

NLP: no light perception; HM: hand motion; CF: counting fingers.