Letters to the Editors

Golimumab treatment for complicated uveitis

Sirs,

Juvenile idiopathic arthritis (JIA) and HLA-B27 associated uveitis can be associated with severe ocular complications and poor visual outcome (1, 2).

Golimumab, a new human monoclonal antibody to TNF-α, was approved for patients with rheumatoid arthritis, psoriatic arthritis and ankylosing spondilitis (3-4).

We retrospectively evaluated the efficacy of subcutaneous injections of golimumab in 6 patients with JIA and 4 patients with HLA-B27 associated uveitis who had an inadequate response to previous TNF-α blockers or other biologic drugs in controlling uveitis and/or arthritis.

Patients attended the Paediatric Rheumatologic Unit at the "Istituto Ortopedico G. Pini", Milan. Inclusion criteria were: inadequate control of uveitis and/or arthritis to one or more TNF-α blockers (etanercept, infliximab or adalimumab), or other biologics (rituximab, abatacept). Golimumab was given subcutaneously at the dose of 50 mg monthly from March 2011 to March 2012.

Data collected included: age, gender, age at onset of uveitis and arthritis, ocular complications, JIA category (ILAR classification) (5), previous systemic immunosuppressant/ corticosteroid therapies, and follow-up.

Primary outcome measures were: response to treatment (decrease in uveitis activity), visual acuity improvement, reduction of concomitant systemic corticosteroids, occurrence of adverse events. Disease activity was graded in accordance with the standardisation uveitis nomenclature (SUN) criteria also for adults JIA patients (6).

Ten patients (5 females; 5 males; 20 affected eyes), with a mean age of 34.2 ±10.3 (SD) years with uveitis were treated.

Four patients were treated with golimumab for active uveitis and arthritis, six for active uveitis. Demographic data, clinical features and treatment details are shown in the Table. Mean age at onset of uveitis was 5.1±3.5 (SD) years (JIA group), 27±6 (SD) years (B27 group).

Mean ocular disease duration was 21.3±6.6 (SD) years. All patients had bilateral uveitis (4 anterior, 7 panuveitis). Ocular complications at the beginning of golimumab were: macular oedema (6 eyes), cataract (6 eyes), glaucoma (4 eyes).

Visual acuity remained stable in 15 eyes, improved in 4 eyes and worsened in one eye (patient n. 8). Cataract extraction was performed in two patients (n. 1, n. 9) three months after initiation of golimumab. Patient n. 9 had severe macular oedema and visual loss after surgical intervention necessitating periocular corticosteroid injections.

The mean uveitis activity before treatment was 2±0.7 (SD) cells and 0.5±0.8 (SD) cells at end of follow-up.

The mean systemic prednisolone dose was 13.75 mg/day before and 6 mg/day after golimumab treatment. At end of follow-up, 7 patients were still on daily systemic low-doses of prednisolone (5–12.5 mg). Methotrexate was the only associated disease-modifying anti-rheumatic drug at end of follow-up in 4 patients. The mean follow-up time on golimumab was 8.2±2.3 (SD) months.

At last visit uveitis was inactive in 8 patients, and active in the two patients that underwent cataract extraction.

Decrease in uveitis activity was evident around the second week after the injection of golimumab with rapid reduction of anterior chamber cells. No serious adverse events were encountered.

Little is known about the use of golimumab in ophthalmology, with only one article reporting favourable results on uveitis (7). Studies from the rheumatologic experience suggest that switching patients from one TNF-α inhibitor to golimumab is effective and well tolerated for active rheumatoid arthritis (3, 4).

Although biologics are effective in controlling uveitis, their use remain mostly "off label" and several patients do not adequately respond to treatment (8-10). Therefore, it's becoming more frequently important to have a wide range of effective therapeutic options available to treat the most serious uveitis cases with more convenient dosing schedule.

Golimumab may be a new therapeutic option for patients with severe uveitis who have not previously responded to biologics. To date, this is the largest case series on golimumab in uveitis patients.

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Table I. Patient demographics, clinical features and treatment data.

Patient number	Gender Age (yrs)	Associated rheumatic disease	Biologics used before Golimumab	Immunosuppressive treatment at last visit	Systemic steroids (at beginning of Golimumab and at last visit) (prednisolone mg/day)	Follow-up Golimumab (months) Activity uveitis (end follow-up)	Visual Acuity (at first injection Golimumab) OD; OS	Visual Acuity (at last visit) OD; OS
1	M; 27	JIA, ANA+ Oligo-ext	Etan, Infl, Adal,	GOL, MTX	25–12.5	8 / yes	20/60; 20/30	20/25; 20/30
2	F; 23	JIA, ANA+ Oligo-ext	Etan, Infl, Adal	GOL	25–10	9 / no	20/50; NLP	20/50; NLP
3	M; 35	JIA, ANA+ Oligo-persist	Etan, Infl, Adal	GOL	20–10	8 / no	20/300; 20/100	20/300; 20/100
4	F; 21	JIA, ANA+ Oligo-ext	Etan, Infl, Adal	GOL	None	11 / no	20/20; 20/30	20/20; 20/30
5	F; 36	JIA, ANA- Oligo-ext	Etan, Infl, Adal	GOL	None	5 / no	20/20; 20/40	20/20; 20/20
6	F; 24	JIA, ANA+ Oligo-persist	Etan, Infl, Adal, Abatacept	GOL	None	12 / no	20.200; NLP	20.200; NLP
7	M; 41	HLA-B27	Etan, Infl, Adal	GOL, MTX	12.5–5	9 / no	20/30; 20/50	20/20; 20/20
8	M; 46	HLA-B27	Etan, Infl, Adal	GOL, MTX	37.5–12.5	6 / yes	20/60; 20/30	20/100; 20/30
9	F; 35	HLA-B27	Etan, Infl, Adal, Abatacept	GOL	12.5–5	9 / no	20/20; 20/20	20/20; 20/20
10	M; 55	HLA-B27	Infl, Adal	GOL, MTX	5–5	5 / no	20/20; 20/200	20/20; 20/200

M: male; F: female; ANA: antinuclear antibodies; MTX: methotrexate; CSA: cyclosporine; Etan: etanercept; Infl: infliximab; Adal: adalimumab; GOL: golimumab. OD: right eye; OS: left eye; LP: light perception; NLP: no light perception.

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