

## LETTERS

# Safety and efficacy of TNF $\alpha$ blockade in relapsing vasculitis

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**B**lockade of tumour necrosis factor alpha (TNF $\alpha$ ) using infliximab, a chimeric monoclonal antibody against TNF $\alpha$ , is an effective treatment in rheumatoid arthritis and Crohn's disease.<sup>1,2</sup> Sifkakis reported success using infliximab in sight threatening Behçet's disease.<sup>3</sup> A preliminary study has also reported clinical improvements in the primary systemic vasculitis, Wegener's granulomatosis, with the soluble TNF $\alpha$  receptor etanercept.<sup>4</sup> The benefit of lenercept, a soluble p55 TNF $\alpha$  receptor fusion protein, on digital vasculitis in rheumatoid arthritis has also been reported.<sup>5</sup>

We report the compassionate treatment of six patients with refractory vasculitis using infliximab. Diagnoses were Wegener's granulomatosis in three and microscopic polyangiitis in three. Three patients were positive for proteinase-3 antineutrophil cytoplasmic antibodies (PR3-ANCA) and one for myeloperoxidase (MPO)-ANCA. Four were female, with a mean age of 58 years (range 23–77) and mean disease duration of 3.5 years. All had had at least three clinical relapses and had received prolonged treatment with corticosteroids and at least four immunosuppressive drugs. At the time of infliximab treatment the eyes were affected in four patients and the lung in three; in addition, five had profound constitutional symptoms. The mean prednisolone dose was 17 mg.

Three intravenous doses of infliximab 200 mg were given at monthly intervals for three months. One patient complained of fatigue, myalgia, and blurred vision 24 hours after the first infusion, which did not recur on rechallenge. Infliximab was otherwise well tolerated. Five patients had remission of their disease, four within two weeks of treatment. This allowed steroid withdrawal in three and reduction by more than 50% in two. Disease activity assessed by the Birmingham Vasculitis Activity Scores (BVAS) improved from a mean of 6.3 to 0.8 at three months (fig 1).<sup>6</sup> One patient receiving continued infliximab for six months relapsed when the treatment interval was extended to two months. Mean falls in erythrocyte sedimentation rate and C reactive protein were 17 mm/1st h and 13 mg/l, respectively. The ANCA status was unchanged.

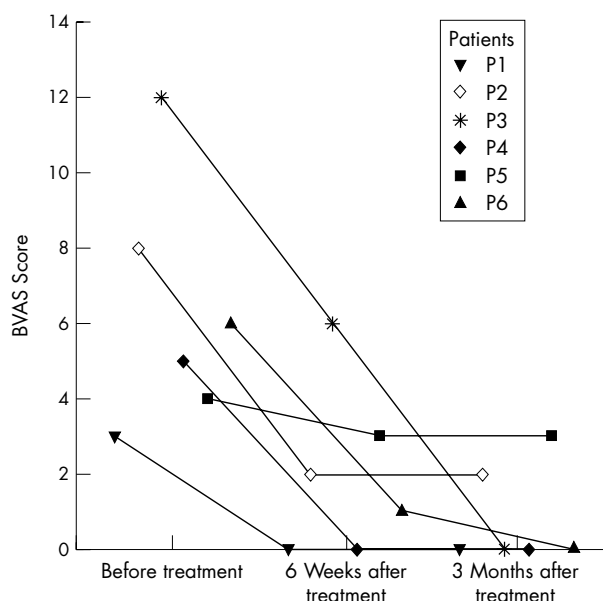
Anti-TNF $\alpha$  treatment heralds a new wave of specifically targeted biological interventions of potential value in the treatment of vasculitis. It offers the hope of improved therapeutic efficacy over current agents and the possibility of reducing exposure to steroids and immunosuppressive drugs. Further studies are warranted to confirm these observations and explore the role of infliximab as a component of initial protocols.

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**Figure 1** BVAS scores for the six patients treated with infliximab.

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