LETTER

Rapid remission of treatment-resistant ankylosing spondylitis with etanercept—a drug for refractory ankylosing spondylitis?

To the Editor:

Treatment of resistant ankylosing spondylitis (AS) is a challenge in clinical practice. Compared with treatment of rheumatoid arthritis, fewer medications have proven efficacy in the treatment of AS, and none so far has documented retardation of radiologic progression. The 2 patients with HLA–B27–positive AS described here had active disease despite treatment with indomethacin, glucocorticosteroids, methotrexate (MTX), and pamidronate. Etanercept led to a profound and rapid improvement in symptoms within days, as well as normalization of C-reactive protein (CRP).

Patient 1 is a 37-year-old man with highly active AS with symptoms of generalized stiffness and pain. Subcutaneous MTX 20 mg weekly over 1 year in addition to the prior regimen of indomethacin 150 mg per day led to moderate improvement in symptoms and reduction of CRP from 8 mg/dl to 4 mg/dl. However, increasing stiffness, fatigue, and back pain with magnetic resonance imaging findings of extensive inflammatory changes with bone marrow edema at the lumbar spine forced a search for new therapeutic options. Corticosteroids, which he had also received in the past, gave only modest benefit, and side effects were not tolerated. A therapeutic trial of intravenous pamidronate in addition to MTX was started but was unsuccessful (1). Etanercept 25 mg subcutaneously twice weekly was added to MTX. The patient reported a dramatic improvement of symptoms and stopped indomethacin the day after the first injection. CRP normalized. MTX was stopped 1 month later. The patient describes a "new life" and states that he is playing badminton with his children, which he was unable to do before.

Patient 2 is a 66-year-old man with long-standing AS and a history of recurrent iritis. He suffered from morning stiffness and from repeated flares of varying peripheral joints despite corticosteroid joint injections, indomethacin up to 150 mg per day, and a trial of MTX at 15 mg weekly for 2½ months. Etanercept 25 mg subcutaneously twice weekly led to rapid and dramatic improvement of pain and stiffness within 2 days, such that the patient did not continue MTX. CRP of 3 mg/dl normalized. Difficulties with insurance coverage led the patient to discontinue etanercept injections, with a subsequent flare of arthritis and iritis. Both resolved within days after reinstitution of etanercept therapy.

Both AS patients experienced a dramatic improvement within days after initiation of etanercept therapy with normalization of inflammatory parameters leading to discontinuation of concomitant MTX and substantial improvement of their functional capacity. A relapse of arthritis and iritis after discontinuation of etanercept in one patient resolved within days after reinstitution of etanercept therapy. Both AS patients (at followup of 12 months) are doing well.

Only a few uncontrolled observations of the use of etanercept in AS have so far been published (2–4). Treatment of AS with infliximab—another tumor necrosis factor α blocking agent—has recently documented similar dramatic benefit in an open-label study with 11 patients (5). The profound improvement of previously treatment-resistant AS with etanercept described here and its superior efficacy in resistant cases of AS warrant further attention and confirmational studies.

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1. Maksymowych WP, Lambert R, Gian S, Jhangri GS, Leclercq S, Chiu P, et al. Clinical and radiological amelioration of refractory peripheral spondyloarthritis by pulse intravenous pamidronate. J Rheumatol 2001;28:144–55.
2. Cohen JS. Clinical and laboratory improvement in ankylosing spondylitis after treatment with etanercept, a case report. J Clin Rheumatol 2000;6:221–4.
3. Marzo-Ortega H, McGonagle D, O'Connor P, Burns S, Wakefield RJ, Emery P. A clinical and MRI assessment of the efficacy of the recombinant TNF alpha receptor: Fc fusion protein etanercept in the treatment of resistant spondyloarthropathy [abstract]. Arthritis Rheum 2000;43 Suppl 9:S101.
4. Gorman JD, Sack KE, Davis JC, Jr. Etanercept in the treatment of ankylosing spondylitis: a randomized, double-blind, placebo-controlled study [abstract]. Arthritis Rheum 2000;43 Suppl 9:S403.
5. Brandt J, Haibel H, Cornely D, Golder W, Gonzalez J, Redding J, et al. Successful treatment of active ankylosing spondylitis with the anti–tumor necrosis factor α monoclonal antibody infliximab. Arthritis Rheum 2000;43:1346–52.