

## Psoriatic Arthritis: Radiographic Joint Repair Following Etanercept Therapy

To the Editor:

We read with great interest Eder and colleagues' article<sup>1</sup> on repair of radiographic joint damage following treatment with etanercept in patients with psoriatic arthritis (PsA). The authors conclusively demonstrated that after more than 2 years of treatment with etanercept, their PsA patient with severe radiographic damage had significant improvement. This finding was clearly documented and confirmed by the use of 3 different methods of radiographic assessment.

Our experience was similar in patients with PsA refractory to conventional therapy, but with significant clinical response to etanercept therapy<sup>2</sup>. In contrast to the Canadian experience, we began using etanercept shortly after it was approved by the US Food and Drug Administration for treatment of rheumatoid arthritis (RA) in the late 1990s<sup>3</sup>. In our report published in 2000<sup>3</sup>, 12 patients with PsA (9 had symmetric polyarthritis and 3 were asymmetric) that had failed other disease-modifying antirheumatic drugs alone or in combination (methotrexate, cyclosporine, azathioprine, and prednisone) were given etanercept 25 mg twice a week. Average duration of followup was 10 months. Ten patients exhibited complete resolution of skin (including nails) and joint involvement, with normalization of erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP)<sup>3</sup>.

Radiographic assessment of the hands and feet was performed in several patients on a yearly basis with the assistance of a musculoskeletal radiologist. After more than 2 to 3 years' duration of etanercept therapy, we began to observe stabilization of radiographic progression, and eventually definite repair of bone erosive changes in some patients. In contrast to the experience of Eder, *et al*, however, there were no changes in joint space narrowing. Also similar to Eder, *et al*, no changes in bony proliferation were noted. As reported by others, radiographic improvement has been demonstrated in patients with initial high serum levels of ESR and CRP<sup>1,2,4</sup>.

We also stated that the radiologic improvement observed in patients with PsA was very similar to that described in RA, and concluded that the use of biologic agents in PsA was highly efficacious and decreased progression of radiographic damage<sup>2,5,6</sup>. Subsequent studies, including the report by Eder, *et al*, provide further confirmation<sup>1,7</sup>. Radiographic findings provide strong support that anti-tumor necrosis factor (anti-TNF) therapy can be followed by repair of joint damage. Further studies are needed to elucidate the pathophysiology of the underlying mechanisms, and also

whether anti-TNF therapy affects axial involvement seen in this patient population.

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## REFERENCES

1. Eder L, Chandran V, Gladman DD. Repair of radiographic joint damage following treatment with etanercept in psoriatic arthritis is demonstrable by 3 radiographic methods. *J Rheumatol* 2011;38:1066-70.
2. Cuellar ML, Espinoza LR. Psoriatic arthritis: management. In: Hochberg MC, Silman AJ, Smolen JS, Weinblatt ME, Weisman MH, eds. *Rheumatology*. Vol. 2. 3rd ed. Philadelphia: Mosby-Elsevier Ltd.; 2003:1259-65.
3. Cuellar ML, Mendez EA, Collins D, Burford S, Espinoza LR. Efficacy of etanercept in refractory psoriatic arthritis (PsA) [abstract]. *Arthritis Rheum* 2000;43 Suppl:S106.
4. Gladman DD, Mease PJ, Choy EH, Ritchlin CT, Perdok RJ, Sasso EH. Risk factors for radiographic progression in psoriatic arthritis: subanalysis of the randomized controlled trial ADEPT. *Arthritis Res Ther* 2010;12:R113.
5. Lipsky PE, van der Heijde DM, St. Clair EW, Furst DE, Breedveld FC, Kalden JR, et al. Infliximab and methotrexate in the treatment of rheumatoid arthritis. Anti-Tumor Necrosis Factor Trial in Rheumatoid Arthritis with Concomitant Therapy Study Group. *N Engl J Med* 2000;343:1594-602.
6. Van der Heijde D, Landewe R, Sharp JT. OMERACT subcommittee on repair. Repair in rheumatoid arthritis, current status. Report of a workshop at OMERACT 8. *J Rheumatol* 2007;34:884-8.
7. Mease PJ, Kivitz AJ, Burch FX, Siegel EL, Cohen SB, Ory P, et al. Continued inhibition of radiographic progression in patients with psoriatic arthritis following 2 years of treatment with etanercept. *J Rheumatol* 2006;33:712-21.

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