Anti-Interferon Shown Promising in Refractory RA

Number of Patients Responding to Treatments

	Day 7		Day 28	
	Anti–IFN-γ	Anti–TNF-α	Anti–IFN-γ	anti–TNF-α
ACR 20	8	7	3	6
ACR 50	3	8	5	5
ACR 70	3	3	6	0

Note: Based on a study of 55 patients who failed previous treatment with at least one disease modifying antirheumatic drug.

Source: Dr. Lukina

BY NANCY WALSH
New York Bureau

VIENNA — The expanding universe of targeted cytokine therapy for autoimmune disease now includes anti–interferon-γ, with results of a small, double-blind study suggesting equal efficacy compared with anti–tumor-necrosis factor–α treatment in refractory rheumatoid arthritis (RA).

The trial included 55 patients who had failed previous treatment with at least one disease-modifying antirheumatic drug. The patients were randomly assigned to receive five intramuscular injections of anti–interferon-γ (20 patients), anti–tumor necrosis factor–α (20 patients), or placebo (15 patients), Galina V. Lukina, M.D., said at the annual European congress of rheumatology.

A total of 16 patients stopped treatment because of lack of efficacy, 2 of them were in the anti–IFN-γ group, 3 in the anti–TNF-α group, and 11 in the placebo group.

By day 28, the total number of ACR responders was 14 in the anti–IFN-γ group, 11 in the anti–TNF-α group, and zero in the placebo group, said Dr. Lukina of the laboratory of clinical pharmacology at the Institute of Rheumatology, Moscow.

At day 7, three patients in each active treatment group had achieved an American College of Rheumatology (ACR) 70 response.

This number doubled by day 28 in the anti–IFN-γ group, but fell to zero in the anti–TNF-α group. (See chart.)

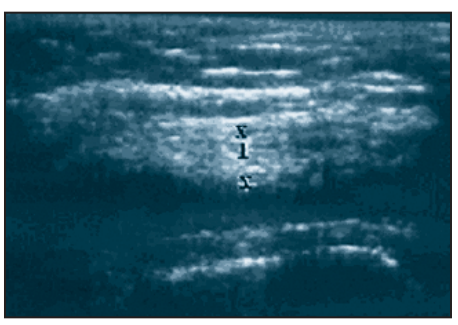
Also at day 7, significant decreases in serum rheumatoid factor were observed in the anti–IFN-γ group but not in the other two groups, she said at the meeting, which was sponsored by the European League Against Rheumatism.

Synovial ultrasound was performed before and after treatment. Only in the anti–IFN-γ–treated patients was there significant reduction in inflammation of the synovial membrane, she said.

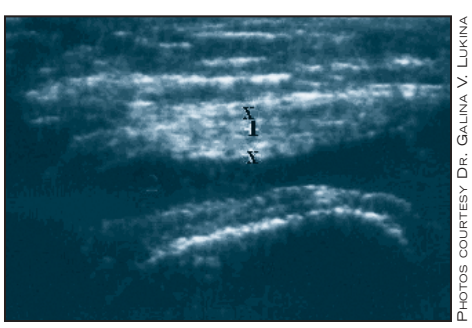
Clinical remission persisted up to 36 months in five patients in each anticytokine group.

"The degree of improvement in patients treated with anti–IFN-γ was comparable with that in patients having received anti–TNF-α and in some aspects was superior to it," Dr. Lukina said.

These results suggest that IFN-γ plays an important role in the pathogenesis of RA, and inhibition of this cytokine is "a promising approach to the therapy of RA, especially in its refractory forms," she said. ■



An ultrasound of the synovial membrane is shown before treatment.



PHOTOS COURTESY DR. GALINA V. LUKINA

After anti-interferon therapy, synovial inflammation is significantly reduced.