Bisphosphonate May Preserve Trabecular Bone

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SAN DIEGO — Risedronate treatment preserved trabecular bone in patients with advanced medial compartment knee osteoarthritis, and at a high dose even appeared to build it, Christopher Buckland-Wright, Ph.D., said at the annual meeting of the American College of Rheumatology.

Despite the loss of cartilage, "high doses of risedronate appeared to protect joints against bone loss, and preserved the structure and integrity," said Dr. Buckland-Wright, professor of radiologic anatomy at King's College London.

If the results are confirmed by additional studies, perhaps bisphosphonate treatment will be used to delay the onset of the compartmental collapse in knees affected by osteoarthritis.

The higher dose of risedronate preserved bone among patients with progressive narrowing of the medial tibial compartment, judging from x-ray findings.

Dr. Buckland-Wright presented the results of an analysis of a multicenter, placebo-controlled trial involving three different doses of risedronate in knee osteoarthritis: 5 mg/day, 15 mg/day, and 50 mg once a week.

His analysis included 100 patients randomly selected from each of the four groups. These patients were selected from the entire 1,200-patient cohort, which included 300 participants in each of the four study arms. The structure and density of trabecular bone in the medial tibial compartment were examined using an x-ray technique developed by Dr. Buckland-Wright.

Overall, most of the patients had evidence of vertical and trabecular bone loss during the 2-year course of the study. But among those who had progressive narrowing of the joint space, risedronate at the higher two doses appeared to preserve bone.

Patients taking 15 mg/day had stabilizing of both vertical and horizontal trabeculae. In the patients taking 50 mg per week, horizontal trabeculae stabilized, and there was an increase in vertical trabeculae, according to Dr. Buckland-Wright.

The patients with progressive narrowing on placebo and on the 5-mg a day dose continued to have bone loss, and had a greater degree of bone loss than those without progressive narrowing during the trial, who had no evidence of benefit at any dose.

The study was sponsored by Procter & Gamble Pharmaceuticals Inc., Mason, Ohio. ■

Drug Lessened Disease Severity

Methotrexate *from page 1*

above 2.4; at 12 months, the study medication was decreased by 5 mg every 4 weeks until discontinuation.

At 3 months, before dosage adjustments were made for DAS severity, the mean decrease in DAS was 0.39 in the methotrexate and 0.005 in the placebo group, a difference that was statistically significant.

At 18 months, fewer patients in the methotrexate group had developed RA and more had achieved remission, compared with those in the placebo group (see chart).

Radiographic progression was significantly higher in the placebo group, noted Dr. van Dongen of Leiden (the Netherlands) University Medical Center.

This randomized clinical trial confirms the existence of a window of opportunity to prevent undifferentiated arthritis from evolving into RA, he wrote. ■

Status at 18 Months After Diagnosis of Undifferentiated Arthritis

	RA	UA	UA in Remission	OA	Lost to Follow-up
Methotrexate (n = 55)	20	13	18	1	3
Placebo (n = 55)	29	8	11	4	3

Source: Dr. van Dongen