Chondroitin Sulfate Could be Disease-Modifying

Kahan found a significant reduction in minimum joint space width (JSW) loss in the CS group (mean +/- SEM -0.07 +/- 0.03 mm) as compared with the placebo group (-0.31 +/- 0.04 mm). The percentage of patients with radiographic progression > or =0.25 mm was significantly reduced in the CS group compared with the placebo group (28% versus 41% [P < 0.0005]; relative risk reduction 33% [95% confidence interval 16-46%]). The number of patients needed to treat was 8 (95% confidence interval 5-17). Pain improved significantly faster in the CS group than in the placebo group (P < 0.01). There were no differences in safety between groups. CONCLUSION: The long-term combined structure-modifying and symptom-modifying effects of CS suggest that it could be a disease-modifying agent in patients with knee OA.

From:

Arthritis Rheum. 2009 Feb;60(2):524-33. Links

Long-term effects of chondroitins 4 and 6 sulfate on knee osteoarthritis: the study on osteoarthritis progression prevention, a two-year, randomized, double-blind, placebo-controlled trial.

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OBJECTIVE: To assess the long-term effects of chondroitins 4 and 6 sulfate (CS) on the radiographic progression of, and symptom changes associated with, knee osteoarthritis (OA). METHODS: We performed an international, randomized, double-blind, placebo-controlled trial in which 622 patients with knee OA were randomly assigned to receive either 800 mg CS (n = 309 patients) or placebo (n = 313 patients) once daily for 2 years. Radiographs of the target knee, using the Lyon schuss view, were obtained at the time of enrollment and at 12, 18, and 24 months. The minimum joint space width (JSW) of the medial compartment of the tibiofemoral joint was assessed by digital image analysis. The primary outcome was the loss in minimum JSW over 2 years. RESULTS: The intent-to-treat analysis demonstrated a significant reduction (P < 0.0001) in minimum JSW loss in the CS group (mean +/- SEM -0.07 +/- 0.03 mm) as compared with the placebo group (-

0.31 +/- 0.04 mm). The percentage of patients with radiographic progression > or =0.25 mm was significantly reduced in the CS group compared with the placebo group (28% versus 41% [P < 0.0005]; relative risk reduction 33% [95% confidence interval 16-46%]). The number of patients needed to treat was 8 (95% confidence interval 5-17). Pain improved significantly faster in the CS group than in the placebo group (P < 0.01). There were no differences in safety between groups. CONCLUSION: The long-term combined structure-modifying and symptom-modifying effects of CS suggest that it could be a disease-modifying agent in patients with knee OA.