

[2002] [THU0215] CORRELATION BETWEEN MEAN AND MINIMUM JOINT SPACE MEASUREMENTS IN A LONG-TERM TRIAL WITH GLUCOSAMINE SULFATE, AN OSTEOARTHRITIS MODIFYING AGENT

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**Background:** In a randomised, placebo controlled, doubled-blind, 3-year prospective study of 212 patients with knee-osteoarthritis, we have shown that Glucosamine sulfate significantly improved the disease symptoms when compared to placebo and slowed-down the joint structure deterioration that characterizes the disease.

**Objectives:** To evaluate the correlation between the two methods of radiographic assessment to measure the characteristic osteoarthritis structural deterioration.

**Methods:** The structural changes were evaluated by both digital image assessment of the mean joint space width (aveJSW) and visual determination of the minimum joint space width (minJSW), by using a graded magnification lens. The signal joint was the medial tibio-femoral joint space, taken on standardized weight-bearing radiographs. The narrowest joint space at enrolment was taken as the primary endpoint for evaluation. The study was a randomized, double-blind, placebo-controlled, prospective, parallel groups study including 212 knee-osteoarthritis patients (ACR criteria).

**Results:** The correlation between the two methods was very high (Spearman's correlation coefficient = 0.65,  $p < 0.01$  for placebo and 0.53,  $p < 0.01$  for glucosamine sulfate).

**Conclusion:** In trials evaluating drugs for structure modification in knee-osteoarthritis, the joint space narrowing can be evaluated by measuring either the mean joint space or the minimum joint space, although the latter might be more sensitive to change. Glucosamine sulfate prevented Joint Space Narrowing compared to placebo by both methods of assessment.

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