NSAIDS May Reduce Fracture Risk in AS

Vertebral fracture risk is doubled for patients with ankylosing spondylitis, but taking NSAIDs seems to reduce the risk. The explanation could be that the drug reduces bone loss.

Source: Rheumatology Network


A large population study from Spain finds that people with ankylosing spondylitis (AS) have almost twice the risk of vertebral fractures of those without the disease, but regular use of non-steroidal anti-inflammatory drugs (NSAIDs) may lower that risk.

The five-year study of almost 6,500 AS patients and more than 32,000 matched controls from a public health database in Catalonia also found that those with AS had a 20% increased risk of clinical non-vertebral fractures -- independent of smoking, alcohol consumption, body mass index, and use of oral corticosteroids.

Among the study cohort, followed from 2006 to 2011, a greater proportion of those with AS than controls had clinical vertebral fractures (0.86% vs. 0.41%, respectively) and non-vertebral fractures (3.4% vs. 2.7%).

At the same time, investigators found the excess fracture risk was decreased among the AS patients who regularly used NSAIDs and increased among non-NSAID users.

Previous studies show upregulation of bone resorption biomarkers in AS patients, along with inflammation-associated loss of bone mass in the hips and spine in longstanding and severe disease. Recent data also suggest patients with early spondyloarthropathies have low bone mineral density (BMD) and a higher prevalence of vertebral fractures.

It’s unknown just how NSAIDs may reduce fracture risk.

One mechanism may be that NSAIDs block the radiographic progression of AS and may inhibit osteoblast function (controlled by prostaglandins) that leads to bone resorption. NSAIDs may also minimize spinal rigidity and relieve inflammatory back pain, improving physical function and activity so that bone mass can be maintained, thereby reducing the risk of falls.

Source URL: http://www.diagnosticimaging.com/spondyloarthritis/nsaids-may-reduce-fracture-risk

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