

BONE

A new angle on the relationship between DISH and AS

“Our data support the hypothesis that noninflammatory mechanisms may play a role in both diseases,” says Xenofon Baraliakos, discussing a comparison of radiographs of patients with diffuse idiopathic skeletal hyperostosis (DISH) or ankylosing spondylitis (AS), now published in *Arthritis & Rheumatism*.

Both DISH and AS involve tendon and ligament ossification—appearing similarly on radiographs—but their underlying pathologies differ. In the absence of a validated scoring system for the progression of DISH, Baraliakos *et al.* borrowed a method used to quantify radiographic changes in AS and applied it to both diseases. 141 patients diagnosed with DISH, and 146 with established AS, were retrospectively included; baseline and follow-up (within 6 years) radiographs were assessed. In addition, the researchers categorized bony changes according to a recently established cut-off: whether the growth was greater or less than 45° to the horizontal axis.

“To our surprise,” says co-author Jürgen Braun, “mean radiographic progression scores were similar in patients with AS and DISH.” Greater progression in AS had been presumed. Differences between the diseases were found, however: as expected, new bone spurs <45° were more frequent than bone spurs of degenerative appearance >45° in patients with AS, whereas the two types of change unexpectedly occurred at a similar rate in patients with DISH. As shown before in AS, baseline bone spurs predicted future bony change in patients with DISH. Now, the researchers aim to compare patients’ genetic profiles and inflammation (on MRI) with their skeletal progression.

Emma Leah

Original article Baraliakos, X. *et al.* Comparing new bone formation in ankylosing spondylitis and diffuse idiopathic skeletal hyperostosis patients—a retrospective cohort study over 6 years. *Arthritis Rheum.* doi: 10.1002/art.33447



Syndesmophytes and spondylophytes in a patient with established ankylosing spondylitis. Syndesmophytes are marked with *, showing bone growth <45° to the horizontal axis. Spondylophytes are marked with O, showing bone growth >45° to the horizontal axis. Image courtesy of Xenofon Baraliakos.