# Fibromyalgia in Spondyloarthritis: Effect on Disease Activity Assessment in Clinical Practice.

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## **Abstract**

#### **OBJECTIVE:**

Spondyloarthritis (SpA) is the second most frequent inflammatory rheumatic disease, characterized by spinal involvement, peripheral arthritis, or enthesitis with marked pain, stiffness, and fatigue. Fibromyalgia (FM) may be associated with SpA, and shares some common symptoms. We aimed to determine how FM influences assessment of SpA disease activity, which is mainly dependent on patient-based outcome measures such as the Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) or the Ankylosing Spondylitis Disease Activity Score (ASDAS).

## **METHODS:**

This single-center cross-sectional study included consecutive patients with SpA according to the Assessment of SpondyloArthritis International Society criteria. FM was diagnosed according to the 1990 American College of Rheumatology criteria. Patient characteristics, BASDAI, ASDAS/C-reactive protein (CRP), Bath Ankylosing Spondylitis Functional Index, Bath Ankylosing Spondylitis Metrology Index, and the Medical Outcomes Study Short Form-36 questionnaire were recorded and compared.

#### **RESULTS:**

The study included 103 patients with SpA; 81 with axial and 22 with peripheral forms. Eighteen patients presented with concomitant FM, of whom 12 had axial SpA and 6 peripheral SpA. Demographic characteristics did not differ except for sex, with a female predominance in the FM group that was more marked in peripheral forms. BASDAI was higher in patients with FM [median (IQR): 4.2 (4.2) vs 2.2 (3.1); p = 0.0068], whereas ASDAS-CRP was not significantly different [median (IQR): 2.7 (2) vs 2 (1.3); p = 0.1264]. Nevertheless, median ASDAS-CRP corresponded to high disease activity in patients with SpA or FM compared with moderate activity in non-FM patients.

## **CONCLUSION:**

FM is a frequent comorbidity in patients with SpA, especially in peripheral forms. In patients with SpA-FM, disease activity may be overestimated when measured by BASDAI and to a lesser extent by ASDAS-CRP, and this overestimation could lead to inappropriate treatment escalation.