

Medical or Research Professionals / Clinicians - Abstract Submission

Spondylarthritis - clinical aspects (other than treatment)

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COMPARISON OF AXIAL SPONDYLARTHROPATHY (ASPA) AND NON ASPA PATIENTS RHEUMATOLOGIST DIAGNOSIS AMONG AN RECENT INFLAMMATORY BACK PAIN PATIENTS COHORT – THE DESIR COHORT

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Background: The ASAS (Assesment of SpondyloArthritis international society) has recently proposed new classification criteria that can reliably classify patients for clinical studies but also for helping rheumatologists in clinical practice in diagnosing AS among those with chronic back pain.

Objectives: The aim of our study was a) to describe aSpA and non aSpA patients according to rheumatologists diagnosis in an inflammatory back pain population before implementation and dissemination of the new ASAS classification criteria and b) to assess the performance of different existing classification criteria for the diagnosis of AS (using rheumatologists' diagnosis as gold standard).

Methods: *Patients:* The DESIR cohort is a prospective longitudinal national French cohort of early inflammatory back pain (IBP) patients. Inclusion criteria were: age between 18 and 50, IBP fulfilling Berlin or Calin criteria, duration over 3 months and less than 3 years. After a standardized consultation, rheumatologists were asked whether the patient had aSpA or not. They also graded their diagnosis confidence on a 0-10 scale. *Analysis:* Univariate and multivariate analysis (logistic regression) aimed at identifying parameters associated to aSpA diagnosis. The level of confidence was considered as a continuous variable. Sensitivity, specificity and positive likelihood ratio (LR) were calculated for the different classification criteria (ESSG, Amor, ASAS), using the rheumatologists' diagnosis as gold standard.

Results: Among 692 IBP patients, 341 were diagnosed aSpA (49.2%) of whom 53.8% had MRI sacroiliitis, 34.3% X-Rays sacroiliitis, 69.2%, 80.1% and 78.3% fulfilled Amor, ESSG and ASAS criteria (ASAS "sacroiliitis" 51.0%, ASAS "B27" 68.9%). The median diagnosis confidence was 8.0 (IQR = 7.0 – 9.0). Four parameters were associated to aSpA diagnosis: improvement after NSAID intake, psoriasis, HLA B27 and sacroiliitis. Because MRI sacroiliitis and X-rays sacroiliitis were highly correlated, we assessed parameters performances in 2 different models. Model 1 (without X-Rays sacroiliitis): improvement after NSAID intake: OR [CI95%]: 1.58 [1.03 - 2.44] (p=0.037), psoriasis: 0.42 [0.27 - 0.68] (p=0.0003), HLA B27: 2.35 [1.66 - 3.33] (p<0.0001) and MRI sacroiliitis: 2.40 [1.70 - 3.39] (p<0.0001). Model 2 (without MRI sacroiliitis) results were similar, with X-rays sacroiliitis OR = 2.80 [1.72 - 4.56] (p<0.0001). ASAS criteria had the best performance for aSpA diagnosis with positive LR 1.36 [CI95%: 1.2-1.5] vs 1.10 [0.9-1.2] and 1.06 [0.9-1.1] for Amor and ESSG criteria, respectively. ASAS, Amor and ESSG criteria sensitivity/specificity were: 78.3/42.4%, 69.2%/37.0% and 80.1%/24.5%, respectively.

Conclusions: Four parameters are associated to the rheumatologist' diagnosis of aSpA in an early IBP population: improvement after NSAID intake, lack of psoriasis, HLA B27 and sacroiliitis on X-Rays or MRI. ASAS criteria were most relevant than Amor and ESSG in diagnosing aSpA in this population. However, classification criteria seemed to have a poor specificity among this early IBP population.

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Disclosure of Interest: None Declared