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Figure 1.

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POS0944

AGE AT ONSET IN AXIAL SPONDYLOARTHRITIS AROUND THE WORLD: DATA FROM THE INTERNATIONAL ASAS-PERSPA STUDY

A. Boel¹, C. López-Medina², D. Van der Heijde¹, F. A. Van Gaalen¹. ¹Leiden University Medical Centre, Rheumatology, Leiden, Netherlands; ²Cochin Hospital, Assistance Publique Hôpitaux de Paris, Rheumatology, Paris, France

Background: Axial spondyloarthritis (axSpA) typically begins in young adulthood and age at onset is therefore very useful in identifying chronic back patients at an increased risk of axSpA. Age at onset below the age of 45 has been incorporated into the 2009 ASAS classification criteria for axSpA as a mandatory feature. However, inclusion of age at onset before the age of 45 was based on a small number of Western European studies and it is therefore unknown if this age at onset applies to patients in other parts of the world.

Objectives: The aim of this study was to assess age at onset of axSpA as well as its relationship with HLA-B27 throughout the world, using data from the Assessment in SpondyloArthritis international Society (ASAS) peripheral involvement in Spondyloarthritis (ASAS-perSpA) study.

Methods: Analyses were restricted to patients with an axSpA diagnosis who had information available on age at onset of axial complaints. Cumulative probability plots were used to graphically display the cumulative distribution of age at onset of axial symptoms. Linear regression models were built to assess

Table 1. Percentage of axSpA patients with an age at onset of axial symptoms <40, <45 and <50 years stratified by geographical region and HLA-B27 status.

	N	HLA-B27 positive			N	HLA-B27 negative		
		Age at onset <40	Age at onset <45	Age at onset <50		Age at onset <40	Age at onset <45	Age at onset <50
Asia	469	91%	94%	97%	56	79%	88%	95%
Europe & North America	678	88%	94%	98%	184	74%	85%	93%
Latin America	157	81%	94%	96%	38	45%	76%	84%
Middle East & North Africa	320	88%	94%	98%	161	84%	88%	94%
Total	1624	88%	94%	97%	439	76%	86%	93%

the effect of HLA-B27 status on age at onset of axial symptoms. As axSpA is a multifactorial, multigenetic disease, geographical region was investigated as an effect modifier.

Results: The majority (92%) of patients with axSpA had an age at onset of axial symptoms below 45 years, with only small variation across the various geographical regions (table 1). Cumulative distribution plots showed age at onset of axial symptoms was consistently lower in HLA-B27 positive patients (in blue) than in HLA-B27 negative patients (in red) across all geographical regions (Figure 1 below). Linear regression models showed a significant effect of HLA-B27 status on the age at onset of axial symptoms in the total study population ($p < 0.001$), and Latin American ($p < 0.001$), European & North American ($p < 0.001$), Asian ($p = 0.006$) and Middle Eastern & North African ($p = 0.005$) populations. There was no effect modification of geographical region ($p = 0.50$) on the association between HLA-B27 status and age at onset of axial symptoms.

Conclusion: Irrespective of geographical region, the majority of axSpA patients had an age at onset of axial disease before the age of 45. In all populations, HLA-B27 was associated with earlier disease onset. These results provide crucial data for diagnosis, classification, and policies aimed at improving recognition of axSpA.

Figure 1. Cumulative distribution of the age at onset of axial symptoms for Asia (A), Europe & North America (B), Latin America (C), and Middle East & North Africa (D). The black lines represent all patients in a given continent, the blue lines represent HLA-B27 positive patients, and the red lines represent the HLA-B27 negative patients. The horizontal black dashed line represents the 95% point, and the black, blue and red vertical lines represent the age at which 95% of patients developed axial complaints in the total population, HLA-B27 positive and HLA-B27 negative patients respectively.

Figure 1.

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POS0945

NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS IN THE AFRO-CARIBBEAN POPULATION, CLINICAL ASPECTS AND PARTICULARITIES

F. Louis-Sidney¹, D. Morillon², M. Blettery¹, L. Brunier¹, P. Numeric³, M. De Bandt². ¹Hopital La Maynard Martinique, Rheumatology, Fort-de-France, Martinique; ²Hopital La Maynard Martinique, Radiology, Fort-de-France, Martinique; ³Hopital La Maynard Martinique, Rheumatology, Fort-de-France, Martinique

Background: Spondyloarthritis is a polymorphic disease and the absence of diagnostic marker has led to propose diagnostic criteria for recognition. All the criteria, established in Caucasian populations, place at the center of the approach sacroiliac imaging and genetic terrain (HLA B27). For this reason, these criteria are not appropriate in populations lacking HLA B27. SPA is known to be rare in African populations and this rarity correlates with that of HLA B27. Prevalence of B27 in French West Indies is 2% (identical to the African populations).

Objectives: We report clinical manifestations of SpA seen at the Fort de France University Hospital, with an emphasis on the so-called "non-radiographic SpA" (NRSPA).

Methods: Adult patients with spondyloarthritis seen over a period of three consecutive months, were invited to participate in a survey and filled-in a self-administered questionnaire. The consulting rheumatologist specified the rheumatologic and extra-articular involvement, BASDAI score, HLAB27 data, markers of inflammation and imaging.