

How The Delay In Diagnosis Impacts On The Clinical, Functional and Radiographic Status Of Patients With Ankylosing Spondylitis. Is There a Window Of Opportunity?

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Background/Purpose: The delay in diagnosis has deleterious effects in patients with Rheumatoid Arthritis. This fact has not been fully investigated in patients with Ankylosing Spondylitis (AS). Objective: To determine the influence of the delay in the diagnosis, over the clinical, functional and radiographic status in patients with AS.

Methods: Consecutive patients ≥ 18 yrs old with AS (ASAS 2009 criteria) were included. Demographic, clinical and therapeutic aspects of the disease were collected prospectively in our AS outpatient clinic. Specific questionnaires to determine disease activity (BASDAI), functional capacity (BASFI), quality of life (ASQoL), metrology (BASMI) are performed every 6 months. Cervical, lumbar and pelvic X-rays are performed yearly and read by a single, blinded observer, according to BASRI. Delay in diagnosis was assessed as a continuous variable and expressed as median (IQR), but also patients were divided in 3 groups according to the delay in diagnosis. Group 1: ≤ 3 yrs, Group 2: $\leq 3 - 10$ yrs, and Group 3: ≥ 10 yrs. Differences were assessed by ANOVA, Chi Square test and multiple regression analysis adjusting for confounders and propensity scores. Dichotomous dependent variable was set using extreme categories (G1 vs. G3).

Results: 147 patients were included, 111 (75.5%) were male, median age 46 yrs (IQR 18–35). Median time delay for the diagnosis was 5 yrs (IQR 2–13). 62 patients (42.4%) belong to group 1 (≤ 3 yrs), 36 (24.5%) to group 2, and 49 (33.3%) to group 3. Patients with juvenile onset were less frequently observed in group 1 (16.7%) as compared to other groups ($p < 0.01$). Patients in G1, were significantly older at the time of diagnosis as compared to the other groups (30 yrs, 23 yrs and 22 yrs respectively, $p < 0.02$). Presence of tarsitis was more frequent in G1 (58% vs. 25% $p < 0.01$). Gender, comorbidities, NSAID, DMARD and biologic treatment were comparable between groups. After a median follow-up time of 12 years and after adjusting for disease duration, BASDAI, BASFI, ASQoL, and BASMI were comparable between groups. There was only a tendency, not reaching statistical significance of a greater BASRI in group 3.

Conclusion: We did not observe that the delay in diagnosis has had a major impact in functional capacity, quality of life or radiographic damage in our cohort of patients with AS.