

# Health Professionals/Practice and Research

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## TIME TO DIAGNOSIS, BUT NOT DISEASE DURATION, IS ASSOCIATED WITH POOR QUALITY OF LIFE IN SPONDYLOARTHRITIS: RESULTS FROM THE ASAS-COMOSPA STUDY

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### Background:

Spondyloarthritis (SpA) is a group of related chronic inflammatory conditions associated with impaired quality of life.

### Objectives:

To explore the potential associations between both “Time to Diagnosis” and “SpA Disease Duration” and current quality of life in SpA.

### Methods:

Using ASAS-COMOSPA, a large international cross-sectional study comprising 3984 patients with SpA, we investigated the association between either “Time to Diagnosis” (time from symptom onset to diagnosis) or “SpA Disease Duration (time from symptom onset to study visit)” and current quality of life at the single study visit. Data collected from 5 domains of quality of life in EQ-5D-3L were summarised as an index (ranging from -0.59 to 1.00). In separate models of linear regression, the association between the aforementioned chronology parameters with the quality of life index were investigated before and after adjustments for age, sex, education, HLA-B27, BMI, smoking, alcohol, and medication (NSAIDs, steroids, DMARDs, biologics) history.

### Results:

Data for 3923 patients (35.1% female; mean age 43.21 (SD: 13.89) years) were available for this analysis. The median (IQR) quality of life index was 0.64 (0.36 – 0.89) for the entire cohort. In multivariate analysis, “Time to Diagnosis” was significantly associated with poorer quality of life ( $p=0.005$ ). Other factors and covariates associated with adverse quality of life were higher BMI ( $p<0.001$ ), smoking ( $p=0.003$ ), ever use of NSAIDs ( $p<0.001$ ), ever use of steroids ( $p<0.001$ ) and ever use of biologics ( $p=0.002$ ). Factors associated with favourable quality of life were male gender ( $p<0.001$ ), higher education ( $p<0.001$ ) and HLA-B27 positivity ( $p=0.006$ ) (Table). In contrast, “SpA Disease Duration” was not associated with the current quality of life index when corrected for confounders, including age.

**Table: Association between Quality of Life index and “Time to Diagnosis” in Spondyloarthritis, adjusted to all potential confounders**

Factors	$p$ value	Coefficients (B)	95% CI for B
Time to Diagnosis (1 year blocks)	0.005	-0.002	-0.004 , -0.001
Age	0.134	-0.001	-0.002 , 0.000
Sex (M vs F)	<0.001	0.070	0.045 , 0.096
Current BMI	<0.001	-0.008	-0.010 , -0.005
Smoking (pack-year)	0.003	-0.001	-0.002 , 0.000
Alcohol intake (higher)	<0.001	0.026	0.015 , 0.037
Education (higher)	<0.001	0.036	0.019 , 0.054
HLA-B27 (+)	0.006	0.037	0.011 , 0.064
Ever NSAIDs	<0.001	-0.122	-0.147 , -0.096
Ever Steroids	<0.001	-0.138	-0.163 , -0.113

Ever DMARDs	0.489	-0.009	-0.034 , 0.016
Ever Biologics	0.002	-0.037	-0.061 , -0.013

**Conclusions:**

In this global cohort of patients with SpA, time to diagnosis but not the duration of SpA appears to be associated with current quality of life, as assessed by the EQ-5D-3L index. Future work should explore geographic variation and whether this association is the same for axial and peripheral SpA disease.

**Disclosure of Interest:** None declared