## FoU Spenshult

Reumatologisk forskning och utveckling

# Symptoms of Pain, Fatigue and Self-efficacy in Young Patients With Spondyloarthritis

### - A Comparison Between Women and Men

A.Torell<sup>1</sup>, A. Bremander<sup>2, 3, 4</sup>, S. Bergman <sup>3, 4, 5</sup>, E. Haglund\* <sup>2, 4</sup>

<sup>1</sup>Department of physiotherapy, Ängelholms sjukhus, Ängelholm, <sup>2</sup>School of Business, Engineering and Science, Halmstad Univeristy, Halmstad, <sup>3</sup>Department of clinical Sciences, Lund, Section of rheumatology, Lund University, Lund, <sup>4</sup>Spenshult R&D center, Sweden, Halmstad, <sup>5</sup>Primary Health Care Unit, Department of Public Health and Community Medicine, Institute of Medicine, The Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

#### CONCLUSIONS

A significant proportion of both women and men reported symptoms consistent with chronic widespread pain already at young age.

Women reported in general worse health compared to men, including pain distribution, pain intensity and pain management.



CONTACT

For additional information, please contact anna.torell@skane.se

#### Background

Studies have shown gender differences in disease specific areas in patients with spondyloarthritis (SpA) but few studies have focused on the younger group of patients.

#### Objectives

To study self-reported characteristics with regard to pain, fatigue, health status, disease activity, self-efficacy, life style factors, and physical and mental functions in young patients with SpA. A second aim was to study the differences between young women and men with SpA.

#### Methods

All patients aged 18-36 years (n=210) with SpA were identified through the Skane health care register (Sweden) by searching for ICD-10 codes for SpA between the years 2003-2007. 29% were diagnosed with ankylosing spondylitis (AS), 39% with psoriatic arthritis (PsA), and 32% with undifferentiated spondyloarthritis (USpA).

Analysis were based on a questionnaire survey in 2009, including questions concerning pain intensity (NRS 0-10) and pain distribution (pain manikin), fatigue (NRS 0-10), general health (NRS 0-10), disease activity and physical function (BASDAI and BASFI, 0-10), anxiety and depression (HADa and HADd, 0-21), EQ5D (0-1), self-efficacy (ASES 10-100). Body Mass Index (BMI), smoking status and data concerning meeting recommendations of health enhancing physical activity (PA) were also collected.

Patients were categorized into groups; no chronic pain (NCP), chronic regional pain (CRP) or chronic widespread pain (CWP) based in the pain manikin.

Characteristic symptoms were reported as mean, standard deviation (SD) and frequencies. T-test and Chi2 test were used to study gender differences.

#### Results

- The mean age (SD) was, 30 (5) years, 60% were women. The group reported disease activity scores (BASDAI) of 3.8 (2.3), health status 0.76 (0.16) and a disease duration of 7 (5) years (table 1 and 2).
- > Women reported worse pain, more fatigue, impaired general health, higher disease activity, lower physical function, and less self-efficacy compared to men (table 2).
- ➤ No differences were found concerning mental health status, and frequencies in meeting recommendations of PA (table 2).
- ➤ In total, 21% reported CRP, 41% CWP and the remaining 38% reported NCP. More women reported CWP pain than men (p= 0.026) (table 2).

Tabell 1. Demographics and characteristics for all. stratified for women and men and for different subtypes of spondyloarthritis

|                                      | All       | Women     | Men       | AS        | PsA       | USpA      |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                      | n =210    | n = 126   | n = 84    | n = 61    | n = 81    | n = 68    |
| Age. years                           | 30 (4.6)  | 30 (4.6)  | 31 (4.6)  | 31 (4.3)  | 29 (5.5)  | 31 (3.7)  |
| Disease duration. years              | 6.7 (4.9) | 6.4 (4.7) | 7.0 (5.2) | 7.0 (4.9) | 7.2 (5.6) | 5.8 (4.0) |
| Symp-diagnosis. years¹               | 3.7 (4.3) | 4.3 (4.9) | 2.8 (3.2) | 4.6 (3.9) | 3.0 (4.0) | 3.6 (5.0) |
| $BMI^2$                              | 25 (4.8)  | 24 (5.1)  | 26 (4.2)  | 24 (3.4)  | 25 (5.2)  | 25 (5.3)  |
| Education level $^3 > 12$ år . antal | 97 (46%)  | 58 (46%)  | 39 (47%)  | 37 (61%)  | 24 (30%)  | 36 (53%)  |

<sup>&</sup>lt;sup>1</sup>Years between first symptoms and diagnosis <sup>2</sup>Body Mass Index <sup>3</sup> Number and percentage with a level education > 12 year

Tabell 2. Self-reported health for all, and stratified for women and men

|                                   | All         | Women       | Men         | P - value |
|-----------------------------------|-------------|-------------|-------------|-----------|
| Pain (NRS 0 – 10)                 | 3.5 (2.4)   | 3.9 (2.4)   | 2.8 (2.1)   | 0.001     |
| Fatigue (NRS 0 – 10)              | 4.5 (2.7)   | 5.0 (2.6)   | 3.9 (2.7)   | 0.003     |
| General health (NRS $0-10$ )      | 3.5 (2.2)   | 3.9 (2.1)   | 2.9 (2.1)   | 0.001     |
| BASDAI $^{1}$ (0 – 10)            | 3.8 (2.3)   | 4.2 (2.2)   | 3.2 (2.3)   | 0.008     |
| BASFI <sup>2</sup> (0 – 10)       | 2.1 (2.0)   | 2.4 (2.0)   | 1.5 (2.0)   | 0.002     |
| $EQ-5D^{3} (0-1)$                 | 0.76 (0.16) | 0.75 (0.15) | 0.79 (0.17) | 0.069     |
| HADa <sup>4</sup> (0 -21)         | 5.9 (4.0)   | 6.2 (3.9)   | 5.5 (4.1)   | 0.240     |
| $HADd^{5} (0 - 21)$               | 3.7 (3.3)   | 3.7 (3.1)   | 3.6 (3.5)   | 0.729     |
| ASES <sup>6</sup> pain (10 – 100) | 56 (21)     | 53 (20)     | 59 (21)     | 0.040     |
| ASES $^6$ symptoms (10 – 100)     | 61 (20)     | 59 (19)     | 65 (20)     | 0.038     |
| Non-smokers, %                    | 143 (68%)   | 77 (61%)    | 66 (79%)    | 0.008     |
| Meeting rec PA <sup>7</sup>       | 143 (69%)   | 81 (65%)    | 62 (74%)    | 0.195     |
| NCP8/ CRP9/ CWP <sup>10</sup> . % | 38/21/41    | 31/21/48    | 48/22/30    | 0.026     |

Bath Ankylosing Spondylitis Indices for self-reported <sup>1</sup>disease activity and <sup>2</sup>function. <sup>3</sup>EuroQol-5-domain. Hospital Anxiety and Depression scale for <sup>4</sup>anxiety and <sup>5</sup>depression. <sup>6</sup>Arhtritis Self-Efficacy Scale, (low – high). <sup>7</sup>Meeting recommendations of healthenhancing physical activity. <sup>8</sup>No chronic pain (NCP), <sup>9</sup>Chronic regional pain (CRP), <sup>10</sup>Chronic widespread pain (CWP).







