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# Smoking and associated factors in patients with psoriatic arthritis\*

Ann Bremander, PT, PhD<sup>1,2,3</sup>, Lennart TH Jacobsson, MD, PhD<sup>4,5</sup>, Stefan Bergman, MD, PhD<sup>1,2</sup>, Emma Haglund, PT, MSc<sup>1,2</sup>, Ingemar F Petersson, MD, PhD<sup>2,6</sup>

<sup>1</sup>Research and Development Centre, Spenshult, Halmstad, Sweden, <sup>2</sup>Dept. of Clinical Sciences, Lund, Section of Rheumatology, Lund University, Lund Sweden, <sup>3</sup>School of Business and Engineering, Dept. of Exercise Physiology, Biomechanics and Health, Halmstad University, Halmstad, Sweden, <sup>4</sup>Section of Rheumatology & Inst. of Clinical Sciences Malmö, Lund University, Lund, Sweden, <sup>5</sup>Dept. of Rheumatology & Inflammation Research, Inst. of medicine, The Sahlgrenska Academy, University of Gothenburg, Sweden, <sup>6</sup>Musculoskeletal Sciences, Dept. of Orthopedics, Clinical Sciences Lund, Lund University, Lund, Sweden

## CONCLUSION

Patients who were ever smokers reported worse clinical features compared with never smokers.

Further longitudinal studies are needed to better understand cause and effect.

Smoking cessation should be recommended due to general health perspectives and also due to disease specific issues.

## INTRODUCTION

Smoking has been found to be associated with an increased risk of developing psoriatic arthritis (PsA)<sup>1</sup>.

## AIM

The purpose of this study was to analyse possible associations of smoking habits with self-reported clinical features in a large population based cohort of patients with a diagnosis of PsA.

## PATIENTS AND METHODS

All health care seeking subjects with a diagnose of PsA according to ICD 10 codes (given at least once by a rheumatologist or an internist or twice by any other physician) were identified by a regional health care register during 2003-2007<sup>2</sup>.

In 2009 all identified subjects aged 18 years or older (n=2003) were invited to participate in a cross sectional questionnaire survey.

The questionnaire included self-reported data on smoking (never smokers or ever smokers), age at disease onset, physical function (HAQ, 0-3 best to worst), pain, fatigue and global health (numerical rating scales 0-10 best to worst) health related quality of life (EQ-5D, 0-1 worst to best), and number of painful areas noted on a pain mannequin (Pain-A, 0-16, best to worst).

Linear regression analysis with parameter estimates ( $\beta$ ) was performed and all data were controlled for sex and age.



## RESULTS

Response rate was 77% whereof 1185 (59%) returned the questionnaire. 18% declined participation.

- Mean age was 57.5 (SD 13.5) years
- 58% were women.
- 448 (38%) were never smokers
- 725 (62%) were ever smokers

Ever smokers had worse outcome compared with never smokers:

- Pain  $\beta$  0.38 (95% CI 0.09 ; 0.67)
- Fatigue  $\beta$  0.34 (95% CI 0.02 ; 0.66)
- Global health  $\beta$  0.36 (95% CI 0.09 ; 0.64)
- EQ-5D  $\beta$  -0.04 (95% CI -0.07 ; -0.01)
- Pain-A\*  $\beta$  0.54 (95% CI 0.02 ; 1.07)

\*Number of painful areas

Table. Subject descriptive as never smokers vs. ever smokers, N 1185

	PsA	
	Never smokers mean (SD)	Ever smokers mean (SD)
Age, yrs	42.3 (13.4)	46.0 (13.2)
HAQ	0.59 (0.6)	0.71 (0.6)
EQ-5D	0.68 (0.23)	0.63 (0.26)
Global health	3.9 (2.4)	4.4 (2.3)
Fatigue	4.4 (2.8)	5.0 (2.7)
Pain	3.9 (2.4)	4.4 (2.5)
Pain-A	7.2 (4.0)	7.9 (4.3)

## REFERENCES

- 1 Smoking and risk of incident psoriatic arthritis in US women. W Li, J Han, AA Qureshi. Ann Rheum Dis 2012 Jun;71(6):804-8.
- 2 Prevalence of spondyloarthritis and its subtypes in southern Sweden. Haglund E, Bremander AB, Petersson IF, Strömbeck B, Bergman S, Jacobsson LT, Turkiewicz A, Geborek P, Englund M. Ann Rheum Dis. 2011 Jun;70(6):943-8.