FoU Spenshult

Reumatologisk forskning och utveckling

Chronic widespread pain in patients with rheumatoid arthritis: a seven year follow-up of pain distribution and factors for improvement

M.L.E Andersson[1, 2], B. Svensson[1], S. Bergman[2, 3] on behalf of the BARFOT study group
[1]Department of Clinical Sciences, Section of Rheumatology, Lund University, Lund, Sweden [2]Spenshult Research and Development Center, Halmstad, Sweden
[3]Primary Health Care Unit, Department of Public Health and Community Medicine, Institute of Medicine, The Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

Conclusion

Lower scores in pain related variables and fatigue, normal BMI, better physical function and health related quality of life, and biologic treatment were associated to improvement from CWP in patients with RA.

Knowledge of factors associated to improvement from CWP could be helpful when treating RA patients with CWP.

Contact:
maria.andersson@spenshult.se

Background

The knowledge of chronic widespread pain and factors associated to improvement of pain in patients with RA is sparse, in particular regarding longitudinal studies.

Objective

To describe the change of pain distribution reports over time and to identify factors that predict improvement from chronic widespread pain in patients with RA.

Method

Two postal questionnaires were sent out to patients included in the BARFOT (Better anti-rheumatic pharmacotherapy) study, the first in 2010 and the second in 2017. The questionnaire included a pain mannequin, NRS scales of pain, patient global assessment (PatGA) and fatigue, health assessment questionnaire (HAQ), health related quality of life measured by EQ-5D and patient reported BMI and 28-joint count of tender (TJC) and swollen joints (SJC). The responders to both questionnaires were divided into 3 groups according to the reported pain duration and distribution at each time point— patients having no chronic pain (NCP), chronic widespread pain (CWP), and chronic regional pain (CRP).

Result

1525 patients answered the pain questions in 2010 and 1046 in 2017. In all 950 of the patients answered the questions at both time points and were included in the study. Out of 324 with CWP in 2010,140 (43%) had improved in 2017. The patients, who improved, had lower BMI, p=0.045, less tender joint counts, p=0.007, less pain, p=0.005, less fatigue, p<0.001 and less painful regions, p<0.001, better PatGA, p=0.002, better HAQ, p<0.001 and better EQ-5D, p=0.003. Fifty-five percent of the patients who improved were treated with DMARD, compared to 52% of those not improving, 32% vs. 26%, p=0.088, were treated with biologics.

Age and sex adjusted logistic regression models for each potential predictor showed an increased chance for improvement in patients with normal BMI, less TJC, pain, fatigue and tender regions and better PatGA, HAQ and EQ-5D, table 1. Biologic treatment also increased the chances to improve from CWP. The most common biologic treatment was anti-TNF treatment.. Age, gender, smoking habits, SJC and glucocorticoid treatment were not associated with improvement in the model.

Table 1 Odds Ratios for potential predictors for improvement from CWP adjusted for age and gender.

		OR	95% CI
Age 2010		1.011	0.992-1.031
Gender	women	0.960	0.542-1.702
Smoking habits 2010	Smoker	0.580	0.282-1.195
	Previous smoker	0.793	0.479-1.311
BMI 2010	<18,5	0.320	0.037-2.930
	18,5-24,9	**2.146**	**1.121-4.106**
	25-29,9	1.294	0.708-2.365
TJC 2010 (0-28)	**<7**	**1.798**	**1.148-2.815**
SJC 2010 (0-28)	<4	1.477	0.943-2.312
PatGA 2010 (0-10, best to worst)	**<4**	**1.806**	**1.146-2.848**
Pain 2010 (0-10, best to worst)	**<5**	**1.836**	**1.164-2.898**
Fatigue 2010 (0-10, best to worst)	**<6**	**3.249**	**2.013-5.246**
EQ5D 2010 (0-1, worst to best)	**≥0.725**	**2.092**	**1.318-3.3821**
HAQ 2010 (0-3, best to worst)	**<0.75**	**1.988**	**1.246-3.173**
Total pain regions 2010 (0-18)	**<8**	**2.987**	**1.888-4.727**
Medical treatment 2010	DMARD	1.779	0,940-3.366
	Biologics	**2.202**	**1.099-4.413**
Prednisolone treatment 2010	Pred	0.753	0.448-1.265

LUND UNIVERSITY

BARFOT

UNIVERSITY OF GOTHENBURG