Fibromyalgia syndrome in patients with rheumatoid arthritis: which criteria is appropriate to define the condition

Sirs,

Previously multiple criteria were used in the diagnosis of fibromyalgia syndrome (FMS) and, in 1990, the ACR developed criteria for the classification of FMS (1). These criteria required only two components: a history of widespread pain for ≥3 months and tenderness at ≥11 of 18 tender points (TP). These criteria have been criticised since they are largely subjective, diagnosis is often made without formal TP examination, and some patients may have TPs but not FMS (2, 3).

Recently Wolfe *et al*. proposed that a Regional Pain Scale (RPS) score of ≥8 together with fatigue score of ≥6 on a VAS constitute research criteria for FMS diagnosis (4, 5). A recent study (2) evaluated the interrelationships of clinical diagnosis, the ACR and survey criteria in FMS definition and showed moderate agreement between ACR and survey diagnosis (κ=0.40). In the present study, we evaluated the performance of ACR and survey criteria in rheumatoid arthritis (RA) patients. 119 consecutive RA patients were included. The survey diagnosis of FMS was made by the use of RPS and a VAS for fatigue. Patients reported if they had pain in 19 nonarticular regions. Patients were also classified according to ACR FMS criteria. This study was approved by the ethics committee and all subjects gave informed consent.

Statistical analysis was done by SPSS version 9.0 (Chicago, IL, USA). Agreement between two different methods was evaluated with kappa statistic and relationship between different parameters with Spearman's correlation test.

Demographic and some of the clinical characteristics of the patients was summarised in the table. Of the 119 RA patients, 21 (18%) had widespread pain, 14 (12%) ≥11 TP, 47 (39%) RPS score of ≥8, 31 (26%) VAS fatigue score of ≥6, and 44 (37%) sleep disturbance. In total, 14 (12%) patients satisfied the survey criteria and 6 (5%) satisfied the ACR criteria. In only two patients FMS could be diagnosed by both survey and ACR criteria (concordance was 87% and κ=0.139). Age, sex, erythrocyte sedimentation rate and CRP levels were found to be not related to FMS diagnosis neither by ACR nor Survey criteria. DAS-28 score was weakly correlated with only ACR FMS classification (p=0.009; r=0.25) and HAQ score was correlated with FMS according to both sets of criteria (p=0.001; r=0.31 for HAQ *vs*. ACR FMS and p=0.008; r=0.25 for HAQ *vs*. Survey FMS). TP count was correlated both VAS fatigue score (p≤0.001; r=0.40) and RPS score (p≤0.001; r=0.42). The relationship of widespread pain with VAS and RPS score was weaker (p=0.001; r=0.29 for VAS fatigue and p=0.004; r=0.26 for RPS score).

Table I. Demographic, clinical and laboratory characteristics of the patients.

	RA patients (n=119)
Mean (±SD) age (years)	56 ± 11
Female (%)	97 (82%)
Mean (±SD) disease duration (years)	9 ± 9
DAS-28 (mean ± SD)	3.8 ± 1.3
HAQ (mean ± SD)	0.78 ± 0.71
CRP (mg/L) (mean ± SD)	14.8 ± 32.2
RF positive patients (%)	78
CCP positive patients (%)	77

There is growing body of evidence on the efficacy of different treatments (6, 7) and the standardisation of outcome measures and assessment instruments (8) in FMS trials. Although utilisation of the ACR criteria has continued to grow in identifying of FMS, there is still debate whether we need validated case definition of FMS (3, 4). In this study, we found a poor agreement between the ACR and survey criteria, though there is substantial concordance due to patients who do not have FMS. These results may not be surprising since in the ACR classification, patients must have widespread pain for ≥3 months, while the RPS enquires about pain and/or tenderness over the past 7 days. In fact another study reported that 46% of patients did not meet the survey criteria over a mean 2.1 years of follow-up (5). A recent study found moderate agreement (κ=0.40) between the ACR and survey criteria (2) and 43 of 100 FMS patients satisfied both criteria. In our study only two patients could be classified by both criteria.

In conclusion, our study showed that, at least in RA patients, the best case definition for FMS was not clear.

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Competing interests: none declared.

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