CONCISE REPORT

A six year prospective study of a cohort of patients with fibromyalgia

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Objectives: To examine the long term prognosis in patients with fibromyalgia (FM).

Methods: Forty five of 70 patients who had participated in a three week trial six years earlier completed again the same questionnaires used previously.

Results: Most symptoms had remained stable. Pain had increased, but some aspects of quality of life had improved over time.

Conclusion: Symptoms of FM persisted over the six years, but patients appeared better able to cope with them.

Fibromyalgia (FM) is characterised by widespread musculoskeletal pain and general symptoms such as fatigue, disturbed sleep, and abdominal pain. It has become a common cause of decreased quality of life and disability. Although it is considered to be a chronic disease, little is known about the long term impact and prognosis. In our study we have re-evaluated by questionnaires a group of patients who participated in a study on electroacupuncture six years before.¹

PATIENTS AND METHODS

In the original study, 70 patients participated. During the following six years they received regular care by their private doctors. As it was only a three week study, all patients were pooled for the re-evaluation. Among them, 45 participated in the follow up study, six years later. Among the 25 patients lost to follow up, one had died, 18 had moved, and six did not want to participate. The patients lost to follow up were younger but did not differ otherwise from the whole group at baseline (table 1).

The following variables were re-evaluated using the same questionnaires as in the initial study: pain scale, sleep quality, morning stiffness, number of analgesic tablets taken during the past week, patients' evaluation of their health, a functional limitations questionnaire, the regional pain score (RPS), and the psychological general wellbeing index (PGWB), a generic quality of life questionnaire. In the RPS, participants are asked to assess pain on a body drawing on which 21 regions are indicated; pain levels range from 0=no pain to 5=unbearable pain. The RPS has been validated with patients with FM.² The PGWB includes five subscales for a total of 22 items measuring anxiety, depression, general health, self control, and vitality. Each item is scored from 0 to 5, for a total score ranging from 0 to 110 (best).³

Statistical analysis

The Mann-Whitney test was used for continuous variables and χ^2 test for discrete variables and the *t* test or Wilcoxon test for paired values.

Table 1 Patient characteristics

	Patients followed up (n=45)	Patients lost to follow up (n=25)	p
Age*	50.6 (11.6)	43.2 (13.3)	0.01
Women (n)	36	18	0.45
Duration of symptoms* (years)	9.9 (8.3)	6.2 (7.3)	0.11
Severity* (0–5; 0 best)	2.9 (0.7)	2.9 (0.8)	0.97

*Mean (SD).

Table 2 Comparison of the patients at the start and after six years

	Baseline	Follow up	p
Pain scale* (1†–100)	57.4 (19.9)	63.2 (28.4)	0.304
Regional pain score* (1†–105)	39.8 (16.7)	50.7 (24.7)	0.002
Sleep quality* (1†–10)	4.8 (2.1)	4.4 (2.5)	0.487
Morning stiffness* (min)	75.6 (76.1)	72 (53.5)	0.788
Number of analgesic drugs (past week)*	8.5 (12.7)	8.9 (10.4)	0.840
Patients' evaluation of health* (1–10†)	4.9 (1.6)	5.2 (2.4)	0.502
Functional limitations questionnaire* (0†–30)	26.0 (6.5)	24.9 (8.3)	0.379
PGWB‡ (0–110†)	50.5 (19.0)	56.5 (18.8)	0.079
Anxiety scale	12.5 (5.8)	12.8 (4.8)	0.725
Depression scale	9.1 (3.4)	9.7 (3.3)	0.384
Self control	8.4 (4.7)	10.2 (3.6)	0.007
General health	5.5 (2.0)	6.6 (3.0)	0.042
Vitality	7.3 (4.0)	8.9 (4.0)	0.022

*Mean (SD); †best; ‡psychological general wellbeing index.³

RESULTS

Table 2 shows the results obtained. All clinical variables remained stable over the six years (table 2). The RPS worsened significantly ($p=0.002$), indicating more pain; 20 (44%) of the patients worsened, 8 (18%) improved, and the remaining 17 (38%) patients did not change. However, despite the increase in pain, there was a significant improvement in the subscales of the PGWB for self control ($p=0.007$), general health ($p=0.042$), and vitality ($p=0.022$).

DISCUSSION

Only a few follow up studies of patients with FM have been carried out. A two year outcome study from a rheumatological

Abbreviations: FM, fibromyalgia; PGWB, psychological general wellbeing index; RPS, regional pain score

community practice in Australia reported remission in about a quarter of the patients.⁴ Kennedy and Felson did a telephone survey in America 10 years after diagnosis in 35 patients with FM: 55% felt their FM symptoms had improved.⁵ However, in a British study of 72 patients from a rheumatology clinic re-examined after a mean of four years, a marked functional disability was found in most of the patients.⁶

Wolfe *et al* followed up 538 patients for seven years.⁷ Although disability increased and pain, fatigue, depression, and anxiety remained stable, satisfaction with health improved slightly.

Similarly, in our study the FM symptoms such as pain and sleep disturbances persisted, but quality of life improved as shown in the results for the self control, general health, and vitality subscales of the PGWB. This indicates some adaptation to the persistence of the symptoms. The difference between the studies reported might be due to different patient groups—for example, according to recruitment. In a study of patients with persistent pain, outcome was better when they attended a family practice than when they attended a specialty pain clinic.⁸ Pain is widespread in the general population but not all people with pain become patients. However, these studies, including ours, indicate that symptoms of FM persist for years.

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