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Improved clinical status in fibromyalgia patients treated with individualized homeopathic remedies versus placebo

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Objective. **To assess the efficacy of individualized classical homeopathy in the treatment of fibromyalgia.**
Methods. **This study was a double-blind, randomized, parallel-group, placebo-controlled trial of homeopathy. Community-recruited persons ($N = 62$) with physician-confirmed fibromyalgia (mean age 49 yr, S.D. 10 yr, 94% women) were treated in a homeopathic private practice setting. Participants were randomized to receive oral daily liquid LM (1/50 000) potencies with an individually chosen homeopathic remedy or an indistinguishable placebo. Homeopathic visits involved joint interviews and concurrence on remedy selection by two experienced homeopaths, at baseline, 2 months and 4 months (prior to a subsequent optional crossover phase of the study which is reported elsewhere). Tender point count and tender point pain on examination by a medical assessor uninvolved in providing care, self-rating scales on fibromyalgia-related quality of life, pain, mood and global health at baseline and 3 months, were the primary clinical outcome measures for this report.**
Results. **Fifty-three people completed the treatment protocol. Participants on active treatment showed significantly greater improvements in tender point count and tender point pain, quality of life, global health and a trend toward less depression compared with those on placebo.**
Conclusions. **This study replicates and extends a previous 1-month placebo-controlled crossover study in fibromyalgia that pre-screened for only one homeopathic remedy. Using a broad selection of remedies and the flexible LM dose (1/50 000 dilution factor) series, the present study demonstrated that individualized homeopathy is significantly better than placebo in lessening tender point pain and improving the quality of life and global health of persons with fibromyalgia.**

KEY WORDS: Fibromyalgia, Homeopathy, Chronic pain, Global health.

The use of homeopathy as a complementary medical treatment for a wide range of acute and chronic conditions is increasing [1, 2], with high levels of patient satisfaction with homeopathic care [3]. Clinicians often report benefit of individualized constitutional homeopathic remedies in patients having overlapping, polysymptomatic disorders, for example fibromyalgia (FM), chronic fatigue syndrome and multiple chemical sensitivity with low-level chemical intolerance, for which conventional medicine has limited options. Fibromyalgia is a chronic diffuse musculoskeletal pain disorder involving concomitant fatigue, sleep disturbance and, often, co-morbid depression [4]. The prevalence in the United States is 2% [5]. Fibromyalgia disproportionately affects women. One randomized, double-blind crossover study of patients meeting criteria for a single homeopathic remedy, Rhus toxicodendron, documented greater improvements over 1 month in number of painful tender points and better sleep on active versus placebo treatment [6].

Although systematic reviews of homeopathy have found that active treatment has an advantage over placebo across various conditions, investigators have called for greater efforts to replicate and extend homeopathic studies on specific conventional diagnostic entities [7]. The debate over poor reproducibility of findings, methodological shortcomings, and interpretation of data from previous studies has been vigorous [8]. The purpose of this study was to perform a randomized, double-blind, placebo-controlled feasibility trial of individualized homeopathy in fibromyalgia using daily LM (1/50 000 dilution factor) potencies.

Methods

Design

A double-blind, parallel group design of randomly assigned active versus placebo individualized, pragmatic homeopathic treatment was implemented. Patients had homeopathic visits at a private clinic in Phoenix, Arizona, at baseline, 2 months, 4 months and 6 months of treatment. They were evaluated with the same battery of outcome measures during laboratory assessment visits at the University of Arizona (Tucson) at baseline, 3 months and 6 months. An optional crossover treatment phase of the study was implemented immediately after the 4-month homeopathic visit and occurred over months 5 and 6 (post-crossover laboratory and clinical results are reported elsewhere [9]).

The 3-month laboratory evaluation and 4-month homeopathic visits were separated in time because of (1) practical considerations

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of subject time/travel burden (because of the 240-mile/4-h round trip between Tucson and Phoenix) and (2) the need to ensure acquisition of follow-up laboratory data prior to the 4-month homeopathic clinical visit and crossover. As a result, the primary outcomes reported in this paper derive from baseline and 3-month Tucson laboratory assessment visits. However, we also include in the present report the patients' ratings of treatment helpfulness obtained at the 4-month clinical follow-up homeopathic visit in Phoenix, for a fuller picture of evolving outcomes up to and immediately prior to the optional crossover point.

Patients daily successed then diluted liquid remedy potencies or placebo in 4 oz of water, all starting with LM 1 doses (a 1/50 000 ratio dilution in 20% alcohol–water solvent, with succussions) or placebo. The LM potency was taken orally and gradually raised over the course of treatment in an individualized manner.

The rationale for LM potencies was two-fold. First, many fibromyalgia patients in the United States take medications for symptomatic relief of pain, insomnia and/or depression. Ethical considerations precluded requiring patients to be completely drug-free for the study. Homeopaths claim that, unlike other dosing methods in their field, LM potencies can be given daily for extended periods and can overcome the presumptive antidoting effects of conventional drugs [10]. Second, approximately half of fibromyalgia patients reportedly have co-morbid multiple chemical sensitivity, including chemical intolerance [11], a condition that involves reportedly hypersensitive, adverse polysymptomatic reactions to multiple different environmental chemicals, many prescription and over-the-counter drugs and even homeopathic remedies [12]. LM potencies in homeopathy are touted to lessen the risk of symptom flares and afford the option of flexible dose adjustment as needed by the individual patient [10].

Upon baseline enrolment and at 3 months, all patients completed a set of questionnaires, underwent conventional medical history and physical examination for tender point pain rating status by a conventional provider not involved in their clinical care (rheumatologist or physician's assistant; the same individual saw a given patient at baseline and follow-up), and had laboratory recordings of electroencephalographic (EEG) and electrocardiographic responses to double-blind olfactory-administered test doses of their treatment solution and solvent controls [13, 14].

Classical homeopathic treatment requires selection of a single homeopathic medicine (remedy) at a time for a given individual, based on the broad themes and idiosyncratic nuances of the whole biopsychosocial clinical presentation. Homeopaths must choose one from over 1300 different possible remedies in the Homeopathic Pharmacopoeia of the United States (www.hpus.com), though typically supported now by computer software programs to assist in narrowing the choices. A major methodological concern of the European Commission Homeopathic Medical Research Group consensus panel who reviewed previous clinical trials was the strong possibility that some remedies in the 'active' treatment group may be incorrectly chosen, especially in a short-term study, thereby unintentionally placing an unknown subset of the 'active' patients on clinically inactive treatment, i.e. essentially a placebo [15]. Under the latter circumstances, a negative finding of no apparent difference between 'active' and placebo treatment groups could result from either a true lack of active treatment effects or simply inaccurate prescribing by the homeopath.

To minimize the latter risk, two experienced homeopaths jointly interviewed every patient at each visit and had to agree on a remedy selection with a confidence rating of at least 7 out of 10 for the patient to enrol. All of the homeopaths in the present study had similar training in classical homeopathy, at least 5 years experience in practice, and certification by the Council for Homeopathic Certification and/or Diplomate in Homeotherapeutics from the American Board of Homeotherapeutics. Study homeopaths used widely available homeopathic software programs as part of their case analyses (MacRepertory and ReferenceWorks, Kent Homeopathic Associates, Inc., San Rafael, CA, USA and Cara-Pro, Miccant Ltd, Nottingham, UK). The study was approved by the Institutional Review Board of the University of Arizona, which adheres to relevant United States Federal guidelines and the Declaration of Helsinki for human subject involvement in research studies. All patients gave written informed consent for their participation.

Recruitment of participants

Volunteer non-pregnant female and male patients with fibromyalgia were recruited from the greater Tucson and Phoenix communities by media announcements, newspaper advertisements, flyers in local health-food stores and word-of-mouth in patient support organizations. Prospective patients had to report a prior physician diagnosis of fibromyalgia, stable conventional medication doses for at least 2 months prior to enrolment (steroid drugs were an exclusion criterion), score to criteria for fibromyalgia on a 15-item, 4-point Likert symptom screening questionnaire and have their fibromyalgia diagnosis confirmed on rheumatological physical examination using the 1990 American College of Rheumatology criteria [16]. Two patients with physician diagnoses of fibromyalgia, with random assignments to placebo, had fewer than 11/18 positive tender points on initial examination, but both met the diagnostic cut-off on the second rheumatological examination. All prospective participants underwent a semi-structured clinical interview for psychiatric and substance abuse disorders prior to enrolment.

To minimize confounds in the psychophysiological component of the study, patients could not have a history of alcohol or drug abuse, current narcotic analgesic, benzodiazepine or antihypertensive medication use or nasal trauma. For patient safety, anaphylaxis history, diabetes, serious neurological, heart, lung, liver or kidney disease, psychosis and active suicidality were also exclusion criteria.

Treatment, blinding and randomization

After each visit, the homeopathic office sent a fax to Hahnemann Laboratories, San Rafael, CA, with current remedy selection and dose prescription. Homeopaths were instructed to treat each participant as if they were receiving active treatment; they were permitted to change remedy prescriptions and potencies at any visit or between visits if clinically indicated. Hahnemann Laboratories dispensed a 16 oz glass bottle monthly (or as needed) of either the active liquid homeopathic remedy in the prescribed LM potency or placebo. All bottles contained the same amount of 20% alcohol-distilled water solvent. Patients began the study on LM 1 potency. The active and placebo bottles were indistinguishable and were all labelled with date, subject number and bottle number [all patients received bottles in order LM 1, LM 2, LM 3, etc., where LM $2 = (1/50\,000)^2$ dilution factor].

Treatment bottles were mailed directly from the pharmacy to each patient, with a split sample bottle of the same material mailed directly to the local research pharmacist. Contents of the bottles were filled in accord with a randomized assignment in blocks of six to either active or placebo group, generated by www.randomizer.org. The randomization was recorded by the study methodologist (AJB), who sent the sequence to the pharmacist at the start of the study. Only the methodologist in Tucson and Hahnemann Laboratories' pharmacist in California had access to the randomization code during the study. The methodologist was available to break the code of individual patients for emergency clinical intervention. This type of situation occurred in only one patient, who dropped out of the study because of her concern about perceived worsening emotional and physical symptoms and a request to the principal investigator for

immediate open label treatment under her own physician's care. This individual turned out to be assigned to placebo. All clinicians and research staff interacting with and assessing patients were kept blinded as to group assignments, including dropouts, for the duration of the study.

Measures

At baseline and 3 months, all patients completed an expectation rating of benefit from treatment, the McGill Pain Questionnaire (short form) [17], Appraisal of Fibromyalgia quality of life scale [18], global self-rated health scale (5-point Likert ratings of current health, health compared with peers, health compared with 6 months ago) [19], and Profile of Mood States (POMS) scale (Educational and Industrial Testing Service, San Diego, CA). Symptom criteria for a chronic fatigue syndrome diagnosis and Bell Chemical Intolerance Index [20] ratings were obtained at baseline. On follow-up visits, patients completed the Patient Satisfaction Scale regarding the homeopaths involved in their treatment [21] and a 0- to10-point Likert scale on helpfulness of the treatment.

Analysis

This study was designed as a feasibility or pilot study rather than a definitive clinical trial, with adequate power planned to detect a large effect in the outcome variable likely to be most sensitive, i.e. tender point pain on palpation (a type of 'stress test' of pain reactivity, as opposed to a pain rating on a standardized questionnaire, such as the McGill Pain Scale, completed while at rest). The previous fibromyalgia study [6] was performed within subjects, with a total sample size of 30; it did not specify dropout rate, standard deviations or confidence intervals to permit statistical power analysis. Since a fairly large effect size (d) was likely to be clinically important, we used an estimate that was large for planning purposes. With $d = 0.8$, assuming a dropout rate of approximately 15% and $\alpha = 0.05$, two-tailed, a sample size of 30 per group enrolled would yield a statistical power of 0.8 for the tender point pain outcome (nQuery Advisor 1997).

We compared active and placebo groups with one-way analyses of variance and χ^2 tests for differences in baseline demographics and clinical status. For subsequent analyses of covariance (SPSS version 11.0, Chicago, IL, USA: GLM procedures), we used baseline values of a given outcome variable and variables on which the groups differed at a $P < 0.10$ level or better as covariates (despite randomization). Primary outcome variables included tender point count, mean tender point pain on palpation, McGill Affective and Sensory Pain Ratings and Appraisal of Fibromyalgia score. Secondary outcome variables were changes in POMS fatigue and depression subscales and global health self-ratings. Groups were compared using general linear model statistics, first without and then adjusted with appropriate covariates as detailed above, including follow-up scores for the active and placebo groups.

Intent to treat (ITT) analyses were conducted for treatment completers (those with 3-month follow-up data) and for the full randomized sample, using mean substitution for values of isolated scale items missing at random and last observation carried forward (i.e. baseline value) for 3-month values of dropouts. Analysis of the ITT treatment completer and ITT last observation carried forward datasets produced the same results. Many statisticians disagree with use of last observation carried forward to generate an ITT dataset when a subject has only a baseline value [22]. Thus, only ITT results for all patients with 3-month follow-up data are shown. Data were analysed with and without the two individuals who carried a physician diagnosis of fibromyalgia but whose tender point counts were initially below criterion. The main findings remained when these individuals were excluded; consequently, results are reported with all subjects included. Statistical significance was set at $P < 0.10$ to examine for trends.

Results

Sample characteristics

After telephone screening, 90 fibromyalgia patients were judged potentially eligible for the study (Fig. 1). From those patients, 62 were randomized, meeting homeopathic agreement for remedy selection. Persons who chose not to participate typically cited

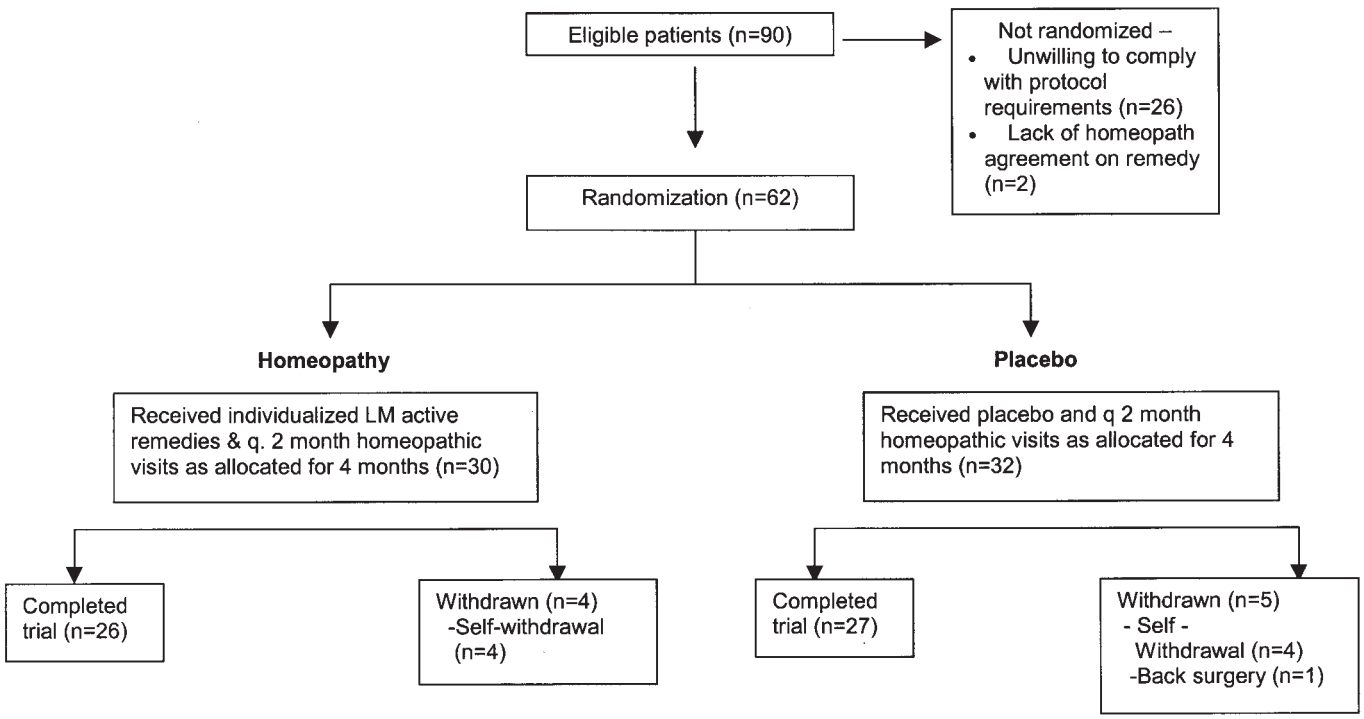

FIG. 1. Patients entered, randomized and withdrawn from the study.

Table 1. Baseline descriptive characteristics of participant sample as randomized, means (SD) unless otherwise stated

	Individualized homeopathy ($n=30$)	Placebo ($n=32$)
Age (yrs)	49.1 (9.9)	47.9 (10.8)
Number of women	29 (97%)	29 (91%)
Ethnicity (no. white)	24 (80%)	29 (91%)
Marital status (no. married)	18 (60%)	20 (63%)
Education (no. with some college or more)	25 (83%)	29 (91%)
Duration of fibromyalgia (yr)	14.8 (14.0)	11.9 (11.4)
Meet Chronic Fatigue Syndrome Diagnostic Criteria (no. with CFS)	25 (83%)	28 (88%)
Bell Chemical Intolerance Score	7.3 (2.6)	7.0 (3.1)
Severity of illness—baseline clinical global impression (0–7) (rheumatologist)	2.7 (0.8)	2.8 (0.6)
Severity of illness—baseline clinical global impression (0–7) (homeopaths' ave.)	4.0 (0.7)	4.1 (0.7)
Patient expectation of benefit from treatment (0–10)	8.1 (1.9)	8.5 (1.8)
Rheumatologist expectation of benefit from treatment (0–10)	3.8 (1.6)	4.0 (1.4)
Ave. homeopath expectation of benefit from treatment (0–10)	6.8 (1.4)	6.8 (0.98)
Non-narcotic pain medications	18 (60%)	17 (53%)
Serotonin re-uptake inhibitor drugs	7 (23%)	5 (16%)
Muscle relaxant drugs	3 (10%)	5 (16%)
Antihistamine or expectorant use*	10 (33%)	0
Individualization ratio of initial homeopathic remedies (unique no. chosen/no. patients)	24/30 (0.80)	25/32 (0.78)
Tender point count (0–18)	16.8 (1.8)	16.4 (2.6)
Tender point pain on palpation exam (0–180)[a]	97.7 (35.0)	82.0 (33.1)
McGill Affective Pain (0–12)	4.2 (2.4)	4.2 (2.8)
McGill Sensory Pain (0–33)	15.6 (5.5)	16.2 (6.2)
Appraisal of fibromyalgia (7–35)	22.4 (5.3)	21.4 (5.0)
POMS fatigue (0–28)	12.1 (7.7)	14.1 (6.6)
POMS depression (0–60)[b]	9.5 (12.3)	4.6 (5.1)
POMS anger–hostility (0–48)[c]	5.0 (7.3)	1.9 (3.3)
Global Health Rating (3–15)	7.1 (2.3)	7.3 (2.9)

*$P<0.001$.
[a]Main effect for group at baseline, $P=0.08$.
[b]Main effect for group at baseline, $P=0.04$.
[c]Main effect for group at baseline, $P=0.03$.

reluctance to make the required trips between Tucson and Phoenix or unwillingness to complete the extensive questionnaire and laboratory components of the study.

Active and placebo groups did not differ in demographic characteristics (Table 1), duration of fibromyalgia, chronic fatigue syndrome diagnostic criteria, chemical intolerance index scores, baseline POMS fatigue scores, global ratings of health or expectation ratings of possible benefit from treatment. Groups had the same number of tender points, but there was a trend for the active group to have more tender point pain on palpation examination at baseline. The active group was significantly more depressed and angry–hostile on the POMS and used more antihistamine and/or expectorant drugs than did the placebo group (Table 1). Thus, POMS depression and anger–hostility as well as baseline values of the relevant outcome variable were covariates in analyses comparing active and placebo group outcomes. Homeopathic remedy choices over the whole sample were highly individualized to the same degree in both groups (homeopaths prescribed 41 different remedies for 62 participants) (supplementary data, Table 3). Only two remedies, Calcarea carbonica and Rhus toxicodendron, each were chosen for four patients.

Treatment outcomes

A total of 53 patients completed the 4 months of the study to the point of optional crossover (14.5% dropout rate). Although the study requirements had been explained thoroughly prior to enrolment, the primary reasons for the nine dropouts nonetheless related to time and travel demands of the study, or excessive experience of scalp pain during EEG laboratory hook-up procedures. Dropout rates and baseline patient demographic characteristics of dropouts did not differ between active and placebo groups. No patient reported an adverse drug reaction to a treatment solution as a reason for dropping out. The 3-month ratings on the Patient Satisfaction Scale for the homeopaths did not differ between groups. Both groups progressed comparably in LM doses (mean LM dose 2.4, s.d. 0.9 at follow-up). However, consistent with the homeopaths' possible perception of a lack of expected improvements over time and consequent decisions to change remedy selections for placebo-treated patients, the average number of remedies recommended by the homeopaths was significantly higher in the placebo group (mean 1.7, s.d. 0.7) than in the active treatment group (mean 1.3, s.d. 0.5) [$F(1,60)=5.5$, $P=0.023$].

For treatment completers, Table 2 shows that the active group exhibited a significantly greater improvement in tender point count and tender point pain on palpation, Appraisal of Fibromyalgia scores and global health ratings, with trends toward lower POMS depression, POMS anger–hostility and McGill Affective Pain scores compared with placebo at 3 months. McGill Sensory Pain ratings did not differ significantly between groups at 3 months. A significantly higher proportion of patients in the active group experienced at least a 25% improvement in tender point pain on examination (13/26, 50%) versus placebo (4/27, 15%) (Fisher's exact test, two-tailed, $P=0.008$). At the 4-month homeopathic visit, patients on active rated the helpfulness of the treatment (7.8, s.e. 0.6) significantly greater than did those on placebo (5.3, s.e. 0.5) ($P=0.004$).

Discussion

The findings demonstrate that the active group on individualized homeopathy showed a greater reduction in tender point count and

TABLE 2. Outcomes after 3 months (active $n = 26$; placebo $n = 27$). Means (standard deviation, S.D.) for actual follow-up values and mean group differences for 3-month follow-up scores (95% confidence interval, CI), unadjusted and covariate adjusted, are shown, using the SPSS GLM UNIANOVA statistical procedure. Adjusted values reflect analysis of covariance using the SPSS GLM statistical procedure, covaried for baseline value of each dependent measure, baseline POMS depression and POMS anger–hostility scores. (Significant differences between active and placebo for adjusted values in follow-up scores also remained significant after re-analysing the data without the 10 patients on active/Verum who reported baseline use of antihistamine or expectorant drugs)

	Mean (S.D.) follow-up (active)	Mean (S.D.) follow-up (placebo)	Unadjusted differences in follow-up scores (95% CI) (active – placebo)	Adjusted differences in follow-up scores (95% CI) (active – placebo)
Tender point count (0–18)	14.8 (3.9)	16.1 (2.7)	–1.3 (–3.2 to 0.56)	–1.9 (–3.5 to –0.24)**
Tender point pain on palpation exam (0–180)	71.3 (36.3)	82.8 (36.0)	–11.0 (–31.0 to 8.9)	–22.6 (–38.3 to –6.9)***
McGill Affective Pain (0–12)	3.3 (2.9)	3.5 (2.7)	–0.14 (–1.7 to 1.4)	–1.0 (–2.2 to 0.16)*
McGill Sensory Pain (0–33)	12.9 (7.4)	12.4 (6.9)	0.48 (–3.6 to 4.5)	–1.2 (–4.1 to 1.7)
Appraisal of fibromyalgia (7–35)	19.2 (5.7)	19.9 (5.3)	–0.62 (–3.6 to 2.4)	–2.1 (–4.0 to –0.28)**
POMS fatigue (0–28)	10.0 (7.0)	13.4 (8.1)	–3.4 (–7.6 to 0.73)	–2.9 (–6.6 to 0.88)
POMS depression (0–60)	7.3 (9.5)	8.1 (10.4)	–0.82 (–6.3 to 4.7)	–4.4 (–8.8 to 0.06)*
POMS anger–hostility (0–48)	2.9 (4.2)	3.7 (6.5)	–0.74 (–3.8 to 2.3)	–2.4 (–5.1 to 0.34)*
Global Health Rating (3–15)	8.2 (2.9)	7.7 (3.0)	0.47 (–1.2 to 2.1)	1.5 (0.14 to 2.8)**

*$P \leq 0.10$, **$P < 0.05$, ***$P < 0.01$.

tender point pain, better fibromyalgia-related quality of life, improved global health and a trend toward less affective disturbance. Notably, Jensen *et al.* [23] previously found that myalgic pain ratings on palpation were a better indicator of fibromyalgia-related disability than tender point count. Other less sensitive outcome measures such as the McGill Pain Scale short-form did not reach significance at $P < 0.05$ with the present sample size. Although regression to the mean might account for some of the apparent improvement in the active group [24], the improved status of the active group compared with the placebo group at 3 months for tender point pain, tender point count, global health and fibromyalgia-related quality of life (Appraisal of Fibromyalgia Scale) remained after covarying for the baseline value of the relevant dependent variable, as well as baseline differences in depression and anger–hostility. These data constitute a replication and extension of the earlier study by Fisher *et al.* [6] showing individualized homeopathic treatment superior to placebo in the treatment of fibromyalgia.

The strengths of the current study include a longer duration of treatment than in the previous fibromyalgia study [6] (3 months versus 1 month), enrolment of persons needing a wide range of different individualized remedies rather than only one (for fidelity to typical homeopathic practice), requirement for agreement of two homeopaths on each remedy selection with high confidence (thereby limiting concerns that the active group could have received non-active treatment), use of daily, flexibly dosed LM potencies to obviate homeopathic methodological concerns from prior studies such as remedy antidoting or aggravations, and inclusion of continuous rather than categorical outcome variables for sensitivity to change.

Weaknesses of the present study include a comparatively small group sample size, providing adequate power for detecting change primarily in tender point pain but not necessarily other outcome measures, and lack of objective measures directly related to fibromyalgia status (none are available in this field). In view of the travel and laboratory session demands, some loss of data from drop-outs might have been avoided by pursuing relevant follow-up outcome measures at times separate from those of the laboratory sessions. Nonetheless, the findings were robust for changes in tender point pain, and other types of objective measures, i.e. EEG variables during olfactory laboratory administration of the homeopathic remedies, did differentiate active from placebo treatment and exceptional clinical responders from all other participants [13, 14].

The most marked divergence between active and placebo treated groups occurred in the pain variable involving central nervous system activation or evocation with stimuli (pressure on tender points), the main variable for which the study was properly powered to avoid Type II error. Convergent evidence identifies the central nervous system as a key mediator of the pain in fibromyalgia [25]. The reductions in tender point pain on examination were clinically meaningful, and, together with the associated changes in EEG alpha cordance (derivative of absolute and relative EEG that correlates with functional neuroimaging scans) in exceptional clinical responders observed in this study [14], raise the possibility of remedy-related attenuation in central processing of painful stimuli. Consistent with homeopathic theories of healing [26], the active remedy group tended to become less, while the placebo group became more, depressed, in addition to the changes in the physical pathology (though overall depression levels were fairly low at baseline). Other outcome variables were statistically significant, but appear less significant in magnitude clinically. Within homeopathic thinking, however, the remedy is not chosen for the diagnosis of 'fibromyalgia', but for the unique person who has the fibromyalgia [26]. Consequently, individualized homeopathy is expected clinically to mobilize changes in multiple domains [27], in some cases leading to gradual improvements in other aspects of health before changes in pain [28].

This is the second study in which homeopathy performed better than placebo in treating patients with fibromyalgia [6]. Given the lack of definitive conventional treatments for fibromyalgia, the lack of improvement in pain over the natural history of the condition [29] and the high rates of utilization of complementary medicine by fibromyalgia patients [30], homeopathy emerges as a potentially low-risk, evidence-based option in an integrated package of care. Homeopaths claim that patients need at least 1 month of active treatment for every year of illness. With that reasoning, the present sample would have required a 12-month, not a 3 to 4 month, trial to assess optimal benefits. In the double-blind optional crossover phase of this study, persons who stayed with active and placebo group assignments for the full 6 months maintained their divergence on the outcome variables [9]. Well-designed randomized controlled trials on larger samples, for longer periods of time, are now indicated, especially in view of emerging basic scientific evidence that homeopathic remedies have physical–chemical properties that differ from those of placebo [31–33].

Supplementary Data

Supplementary data are available at *Rheumatology* online.

The authors have declared no conflicts of interest.

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Rheumatology	Key messages
	• Individualized homeopathy has efficacy in treatment of fibromyalgia. • Daily LM potencies minimize methodological concerns about antidoting homeopathic remedies. • To avoid Type II error, homeopathy trials must evaluate both disease-specific and global outcomes.

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