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## **Low-frequency pulsed electromagnetic field therapy in fibromyalgia: a randomized, double-blind, sham-controlled clinical study**

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### **Abstract**

**Objective:** To evaluate the clinical effectiveness of low-frequency pulsed electromagnetic field (PEMF) therapy for women with fibromyalgia (FM).

**Methods:** Fifty-six women with FM, aged 18 to 60 years, were randomly assigned to either PEMF or sham therapy. Both the PEMF group (n=28) and the sham group (n=28) participated in therapy, 30 minutes per session, twice a day for 3 weeks. Treatment outcomes were assessed by the fibromyalgia Impact questionnaire (FIQ), visual analog scale (VAS), patient global assessment of response to therapy, Beck Depression Inventory (BDI), and Short-Form 36 health survey (SF-36), after treatment (at 4 wk) and follow-up (at 12 wk).

**Results:** The PEMF group showed significant improvements in FIQ, VAS pain, BDI score, and SF-36 scale in all domains at the end of therapy. These improvements in FIQ, VAS pain, and SF-36 pain score during follow-up. The sham group also showed improvement were maintained on all outcome measures except total FIQ scores after treatment. At 12 weeks follow-up, only improvements in the BDI and SF-36 scores were present in the sham group.

**Conclusion:** Low-frequency PEMF therapy might improve function, pain, fatigue, and global status in FM patients.