

# **Efficacy of memantine in the treatment of fibromyalgia: A double-blind, randomised, controlled trial with 6-month follow-up.**

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## **Abstract**

Fibromyalgia (FM) is a prevalent and disabling chronic disease.

Recent studies have found elevated levels of glutamate in several brain regions, leading to hypotheses about the usefulness of glutamate-blocking drugs such as memantine in the treatment of FM.

The aim of this study was to evaluate the efficacy of memantine in the treatment of pain and other clinical variables (global function, clinical impression, depression, anxiety, quality of life) in FM patients.

A double-blind, parallel randomised controlled trial was developed.

A total of 63 patients diagnosed with FM were recruited from primary health care centres in Zaragoza, Spain.

Memantine was administered at doses of 20mg/d after 1month of titration.

Assessments were carried out at baseline, posttreatment, and 3- and 6-month follow-up.

Compared with a placebo group, memantine significantly decreased ratings on a pain visual analogue scale (Cohen's  $d=1.43$  at 6months) and pain measured with a sphygmomanometer ( $d=1.05$ ).

All other secondary outcomes except anxiety also improved, with moderate-to-large effect sizes at 6months.

Compared with placebo, the absolute risk reduction obtained with memantine was 16.13% (95% confidence interval=2.0% to 32.6%), and the number needed to treat was 6.2 (95% confidence interval=3 to 47).

Tolerance was good, with dizziness (8 patients) and headache (4 patients) being the most frequent side effects of memantine.

Although additional studies with larger sample sizes and longer follow-up times are needed, this study provides preliminary evidence of the utility of memantine for the treatment of FM.