

FIBROMYALGIA:

THE LATEST RESEARCH

Fibromyalgia (FM) was first described in 1977. This syndrome combines **chronic diffuse pain, often intense fatigue and sleep disorders**. Other manifestations may be variably associated. These symptoms alter the quality of life and persist for years for many patients, leading to frequent use of health care, as **fibromyalgia weakens a person both physically and psychologically**. Clinical examination inconsistently identifies points where pressure causes pain. This syndrome mainly affects **women between the ages of 30 and 50**. A great deal of work has been devoted to it⁽¹⁾.



A pilot study with endermologie® was conducted in the United States with Dr Gordon, specialised in physical therapy and rehabilitation, and involving ten patients having fibromyalgia for 8 years on average. These middle-aged patients, whose average age was 46.8, underwent 15 medical endermologie® sessions. Given the preliminary results reported in this study (significant improvement in functionality, pain, and patient satisfaction), **medical endermologie® should be considered** in the overall management of fibromyalgia treatment⁽²⁾.

RECOMMENDATIONS OF THE EUROPEAN LEAGUE AGAINST RHEUMATISM (EULAR):

In 2017, EULAR (European League Against Rheumatism) published an update of its recommendations for the management of fibromyalgia⁽⁹⁾. Twelve countries participated in the evaluation of 107 high-quality systematic reviews and/or meta-analyses on pharmacological/non-pharmacological management of fibromyalgia. These reviews were from 1995 to 2015.

EXPERTS WERE UNANIMOUS IN STRONGLY RECOMMENDING PHYSICAL ACTIVITY given its effect on pain, physical function and well-being, as well as its availability, safety and relatively low cost. The benefits of aerobics versus muscle strengthening could not be differentiated.

NON-PHARMACOLOGICAL TREATMENTS

NINE other strategies are also recommended by EULAR to a lesser extent for their effects on pain, fatigue and quality of life: Five are pharmacological treatments, and four are **non-pharmacological treatments**:

- **Cognitive and Behavioural Therapies** (CBTs)
- Combined **therapies**, including at least one educational or psychological therapy and at least one exercise therapy
- **Physical therapies** (acupuncture or hydrotherapy)
- **Meditative movement therapies** (yoga, tai chi and qi gong) and mindfulness

Initial management should involve patient education and focus on non-pharmacological therapies. **In case of non-response, additional and personalized therapies should be tailored** to the specific needs of the individual. Psychotherapy should be provided for



people with mood disorders and when other strategies are failed.

Pharmacological therapies should be offered to people suffering from intense pain or sleep disorders. In cases of serious disability, a multidisciplinary approach should be considered⁽⁹⁾.

RECOMMENDATIONS OF THE TURKISH SOCIETY OF PHYSICAL MEDICINE AND REHABILITATION (TSPMR):

Like EULAR, TSPMR has drawn up a list of recommendations for the management of fibromyalgia syndrome based on a bibliographical analysis of scientific articles published between 2000 and 2018⁽⁴⁾. A total of 46 Physical Medicine and Rehabilitation specialists participated in this analysis.

VARIOUS RECOMMENDATIONS for non-pharmacological, pharmacological and complementary therapies have been identified:

STRONG: Patient education, physical activity, monoamine oxidase inhibitors, and multidisciplinary and interdisciplinary treatments.

MODERATE: antiepileptics, serotonin-noradrenaline re-uptake inhibitors.

WEAK: hydrotherapy/balneotherapy, massage, cognitive and behavioural therapies, non-steroidal anti-inflammatory drugs, selective serotonin re-uptake inhibitors, cyclobenzaprine, Tramadol, tricyclic antidepressants, topical capsaicin and complementary therapies (acupuncture, meditative movement therapies and mindfulness).



RESEARCH BETWEEN JANUARY 2019 AND JANUARY 2020

In 2020, an Italian team described the results published between January 2019 and January 2020 on the diagnosis, etiopathogenesis and treatment of FM.

Some painkillers, antidepressants and cannabis derivatives can be effective in managing pain and associated symptoms. **Partial efficacy and reluctance to use drug therapies leads 98% of patients to**

complementary therapies. Pharmacological treatments appear to have side effects in a very high percentage of patients with FM. Among the non-conventional therapies proven to be useful for various symptoms, the review highlights Transcutaneous Electric Neurostimulation (TENS), systemic ozone treatment, hyperbaric oxygen therapy, certain psychotherapies and physical activity⁽⁵⁾.

RESEARCH SINCE JANUARY 2020

Since the Italian team's publication, other articles describe effective treatments for fibromyalgia. The effect of physical exercise was confirmed by a Brazilian team who analysed 37 journals⁽⁶⁾. The most significant effects of exercise were observed on improving pain intensity and quality of life. Overall, **aerobic exercises and muscle strengthening are effective programs with solid evidence.**

Since the pharmacological treatments available for the treatment of FM are associated with adverse

reactions and limited benefits, an Iranian team reviewed all studies on the impact of melatonin in the treatment of FM. The authors finally selected four studies reporting **the positive effect of melatonin on FM symptoms** in 98 patients. No major adverse events were reported. Significant diversity was observed between the studies. Therefore, further high-quality controlled clinical trials are required to fully understand the role of melatonin in the treatment of FM⁽⁷⁾.



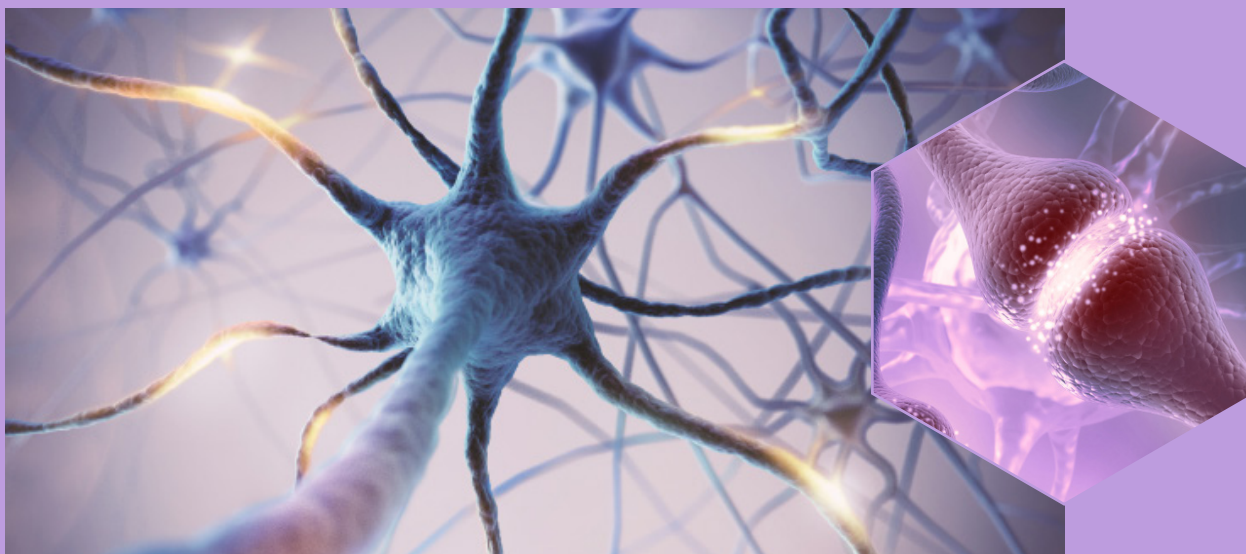
An American team selected randomised, controlled trials of non-invasive/non-pharmacological treatments for five chronic pain conditions, including fibromyalgia⁽⁸⁾. In particular, it analysed the strength of evidence (SOE) in the **short, medium and long term.**

- In the **SHORT TERM**, functional improvements were observed with exercise, body-mind practices, multidisciplinary rehabilitation (SOE: low) and acupuncture (SOE: moderate). Pain was improved with exercise (moderate SOE) and cognitive behavioural therapy (CBT) (low SOE).

- In the **MEDIUM TERM**, there was functional improvement with exercise and acupuncture (SOE:

moderate), CBT, mindfulness-based stress reduction, myofascial release and multidisciplinary rehabilitation (SOE: low). Pain was improved with exercise (moderate SOE), mindfulness practices and multidisciplinary rehabilitation (low SOE).

- In the **LONG TERM**, functional improvements persisted for multidisciplinary rehabilitation without pain improvement (SOE: low).



There is increasing evidence of the effectiveness of electrotherapy in the management of pain associated with fibromyalgia⁽⁹⁾. Transcutaneous electrical neurostimulation (TENS), non-invasive brain stimulation (transcranial direct current/magnetic stimulation) and LASER have emerged as the most commonly examined electrotherapy techniques in fibromyalgia. In addition, these non-invasive techniques have few or no side effects. Further studies are needed to identify optimal treatment protocols for each type of electrotherapy⁽⁹⁾.

AND FINALLY...

Although there is no specific treatment for FM and the evidence is often weak, a large number of pharmacological and non-pharmacological therapies are available. Treatment options have become increasingly rich in ideas and methods for a multidisciplinary approach tailored to each patient. It is

not a treatment by itself that will bring an improvement, but the combination of several, at each phase of the disease, especially in severe cases. Listening and shared decision-making enable patients to feel better informed, well-supported and more satisfied ⁽¹⁰⁾.



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