Fibromyalgia
Diagnosis and Treatment - Part 3

Part 1 - November 2008
Definition, Prevalence, Diagnosis

Part 2 - December 2008
Etiology (Cause)

Part 3 - January 2009
Treatment
Treatment for Fibromyalgia

Medications alone are generally not effective for fibromyalgia.[1,45] A multidisciplinary approach is recommended by the American Pain Society Fibromyalgia Panel.[1,45]

Fibromyalgia may be treated using both conventional and alternative medicine to improve symptoms and generally involves patient education, exercise, physical therapy, supplementation, and pharmacologic therapy. Conventional medicine relies on pharmacological treatments to manage symptoms such as pain, fatigue, and sleep problems, while non-pharmacological treatments, such as exercise, may help with functional improvements.[46]

Patients may also benefit from psychosocial support, education about the disease, support groups, improved sleep, a supportive family, pacing, adopting a healthy lifestyle, avoiding chemical exposures (fragrances, pesticides, etc), and avoiding cigarettes and alcohol.[46]

Survey respondents rate the most effective treatment modalities as rest, heat, pain medications, antidepressants (for use other than depression), and hypnotics.[3]
Some pharmacological treatments that doctors may prescribe include:

**Analgesics**
Analgesics may be prescribed to block glutamate and substance P for pain relief.

**Antidepressants**
Low doses of antidepressant medications may be prescribed to improve sleep and reduce pain. [4,8,47] The beneficial effects of antidepressants in FM are independent of their antidepressant effects. [4,47] Tricyclic antidepressants are the most studied antidepressants which have been shown to improve the symptoms of pain, poor sleep, and fatigue in several randomized, controlled trials. [8]
An example of some antidepressants includes amitriptyline, paroxetine, citalopram, fluoxetine, fluvoxamine, paroxetine, and sertraline. [4,47]

**SSRI’s and SSNI’s**
Selective Serotonin Reuptake Inhibitors (SSRI’s) and/or Selective Norepinephrine Reuptake Inhibitors (SSNI’s) may be helpful to improve physical impairment and functioning, fatigue, pain and stiffness, and number of tender points. [8,45,47,48,49,50,51,52] An example some SSRI’s and SSNI’s include duloxetine, milnacipran, fluoxetine and sertraline appear to be the most effective.

**Lidocaine / Hydrocortisone Injections**
Lidocaine and/or hydrocortisone may be prescribed for persistent pain in one area.
Nonsteroidal Anti-inflammatory Drugs (NSAIDs)
NSAIDs may be used in some cases to reduce inflammation, though they are not often helpful in pain reduction.

GABA
Gamma-aminobutyric acid (GABA) antiepileptic drugs are commonly used for treatment of chronic pain.[53] Pregabalin is one gamma-aminobutyric acid (GABA) analog that is approved for the treatment of neuropathic pain and has been shown to be effective in the significant reduction of pain, sleep disturbances, fatigue, and quality of life.[54] Gabapentin has also been used to treat chronic pain states.[55]
Non-medication methods to relieve symptoms include regular sleep, regular stretching and exercise, hot compresses, gentle massage, and supplementation.[4,47] Low impact aerobic exercise has been shown effective at increasing functional capacity.[47,56]

**Nutrition Therapy**

Nutrition therapy with certain agents that down-regulate the nitric oxide and peroxynitrite (NO/ONOO-) cycle of biochemistry has also been recommended.[57] The following agents have been predicted to be useful to down-regulate the NO/ONOO- cycle and reduce symptoms in clinical trials:[57]

- Nebulized Inhaled Reduced Glutathione (RX Only)
- Nebulized Inhaled Hydroxocobalamin (RX Only)
- Mixed Natural Tocopherols
- Buffered Vitamin C
- Magnesium as Malate
- Four Different Flavonoid Sources:
  - Ginkgo Biloba Extract, Cranberry Extract, Silymarin, & Bilberry Extract
  - Selenium as Selenium-Grown Yeast
- Coenzyme Q10
- Folic Acid
- Carotenoids Including Lycopene, Lutein and Alpha-carotene
- Alpha-Lipoic acid
- Zinc (modest dose)
- Manganese (low dose)
- Copper (low dose)
- Vitamin B6 in the Form of Pyridoxal Phosphate
- Riboflavin 5'-Phosphate (FMN)
- Betaine (Trimethylglycine)
- Green Tea Extract
- Acetyl L-Carnitine

Different combinations of the above treatments may be tried to find the one that works best for each patient.
References