

Fibromyalgia



AcePhysio

acephysio.org



@Acephysio

Fibromyalgia: A chronic, widespread pain disorder and sleep disturbance due to central sensitisation.

Risk factors:

- Female
- PTSD
- History of osteoarthritis, rheumatoid arthritis & systemic lupus nephritis
- Recurrent viral infections
- Recurrent injuries

Pathophysiology:

- Central nervous system sensitisation - exact mechanism unknown
- May be caused by reduced serotonin which normally inhibits nociception
- Increased substance P, nerve growth factor and brain derived neurotrophic factor - promotes nociception
- Increased excitability of dorsal horn neurones → hyperalgesia/allodynia

Presentation

- Increased sensitivity to pain
- Chronic, widespread body pain
- Fatigue which does not improve with rest
- Sleep disturbance
- Mood disturbance
- Headaches which may radiate to the neck & shoulders
- Variable peripheral numbness and paraesthesia
- Global joint stiffness
- Sensitivity to stimuli such as bright lights & noises
- Concentration and memory deficit

Diagnosis

- Presence of **chronic (>3 months), widespread body pain** and associated symptoms such as **fatigue & sleep disturbance**
- Diffuse tenderness to palpation on physical examination
- It is a clinical diagnosis - no imaging required unless to exclude other conditions



Management

- Patient **education** on nature of fibromyalgia including explanation of pain neurophysiology. Also provide advice regarding relaxation techniques
- **Activity modification** - give patient advice regarding pacing, avoidance of exacerbating factors, taking adequate rest breaks and setting realistic goals for functional activities
- Supervised light **aerobic exercise** & **strength/resistance training**
- TENS & joint mobilisation may elicit short-term pain reduction
- **Hydrotherapy** - promotes muscle relaxation and low-intensity exercise which reduces pain and improves patient quality of life
- **Cognitive behavioural therapy** - can improve sleep quality and reduce hyperalgesia
- Medication - pregabalin, gabapentin, serotonin and norepinephrine reuptake inhibitors tricyclic antidepressants, naproxen/tramadol

Want to learn more?

With AcePhysio the learning journey doesn't stop here! Take a look at our further reading recommendations below to become an expert in Fibromyalgia:

1. Martínez M, Miró E, Buela-Casal G, et al. Cognitive-behavioral therapy for insomnia and sleep hygiene in fibromyalgia: a randomized controlled trial. *Journal Of Behavioral Medicine* [serial online]. August 2014;37(4):683-697. Available from: CINAHL, Ipswich, MA.
2. Mannerkorpi K, Nordeman L, Ericsson A, et al. Pool exercise for patients with fibromyalgia or chronic widespread pain: a randomized controlled trial and subgroup analyses. *J Rehabil Med*. 2009;41:751-76
3. Bazzichi L, Da Valle Y, Lucacchini A, et al. A multidisciplinary approach to study the effects of balneotherapy and mud-bath therapy treatments on fibromyalgia. *Clinical And Experimental Rheumatology* [serial online]. November 2013;31(6 Suppl 79):S111-S120. Available from: MEDLINE, Ipswich, MA.