Fibromyalgia as a Soft Tissue Rheumatism

Begüm Saripinarli*
Department of Physiotherapy and Rehabilitation, Okan University, Turkey

Introduction

Muscle, tendon, skin, subcutaneous tissue, ligament, fascia, bursa, synovial membrane, nerve, vein, artery can be held as soft tissues by rheumatologic disease. Soft tissue rheumatism local connective tissue rheumatism is also known as rheumatism or local rheumatologic diseases. Under this heading, many diseases such as fibromyalgia, myofascial pain syndrome, trigger finger, supraspinatus tendinitis, plantar fasciitis can be examined [1-4].

Etiology and Prevalence

Although the etiology has not been fully elucidated, studies on the disease reveal that some of the biochemical, neurohormonal, immunologic, psychological and environmental factors are involved. It is suggested that pain mechanisms in the peripheral and central nervous system are genetically impaired and cause chronic pain [1].

The prevalence in the world varies between 2% and 7.9/10 of the diagnosis are in females. Fibromyalgia prevalence between all rheumatic diseases ranges from 11% to 30%. While most women aged 50-59 are living with the disease, and the prevalence in the population aged 65-80 years is 31%. If the first degree relatives are diagnosed, the person is at eight times at the risk [1].

Diagnosis Criterias

There were 18 tender points that came to mind earlier in the diagnosis of fibromyalgia. These tender points were criterias identified by the American Rheumatology Association (ACR) in 1990 to diagnose fibromyalgia. However, ACR, which published the current criterias in 2010, has developed the ‘Widespread Pain Index’ (WPI) (Figure 1) and ‘Symptom Severity Scale’ (SSS) (Figure 2) for the diagnosis of fibromyalgia. The calculation of the WPI score takes place by giving 1 point for each marked area. In the calculation of the SSS score, 10 separate scores are collected. The obtained number is divided into two to obtain the SSS score. With the updated published in 2011, it was imperative that these symptoms and pain areas should be declared by the patient himself/herself. A patient who meets the following conditions is probably FM. However, it should not be forgotten that not only numerical values but also other factors should be taken into account when diagnosing [6-8].

1. Symptoms and widespread pain have continued for at least 3 months
2. If the Widespread Pain Index score ≥ 17
3. If the Symptom Severity Score score is ≥ 21

Laboratory Testing

As with other rheumatic diseases, laboratory tests of fibromyalgia may contain information for both diagnosis and disease progression. Some of the tests that can be applied to a patient who has a suspicion or diagnosis of fibromyalgia are listed below [6];

1. Kidney and liver function tests
2. Calcium / Phosphate Levels
3. Creatine phosphokinase level
4. Erythrocyte Sedimentation Rate / C-reactive Protein
5. Vitamin D
6. Antinuclear Antibody (ANA)
7. HLA-B27
8. HLA-B51
9. Hormone tests

**Clinical Findings**

**Musculoskeletal**
Stiffness (continuous), fatigue (usually increased in the morning and with the less activity), no joint findings [7].

**Cardiovascular**
Raynaud-like phenomenon or raynaud phenomenon, exercise intolerance, vasomotor disorders [7].

**Sleep**
Waking at night, difficulty in falling a sleep, poor sleep quality [7].

**Cognitive**
Short-term memory loss, perception disorders [7].

**Psychology**
Depression, anxiety, stress [7].

**Pain**
Neck shoulder, waist, gluteal area - burning, acne pain or ache; migraine headache; allodynia, hyperalgesia [7].
Pulmonary
Shortness of breath, chest pain, alveolar hypoventilation [7].

Gastrointestinal
Diarrhea, constipation, abdominal pain or cramps [7].

Endocrinial
Adaptation problems due to Hypothalamic / Pituitary / Adrenal (HPA) dysfunction, dismone [7].

Evaluation
Fibromyalgia affects many systems. Even non-symptomatic systems should be assessed in detail because these systems can also be affected over time, according to prognosis. A good evaluation makes it possible to anticipate problems that may arise in the future and to take precautions for these problems. Evaluations should be carried out due to patients complaint in the foreground and specifying the targets of the possible treatment. It should be determined very well which activities the disease affects the patient’s life. Before the patient is evaluated, a detailed examination should be performed and the patient's condition should be clearly demonstrated using specific tests and disease-specific scores. The patient must be assessed taking into account both the patient's statements and the detailed examination of the physiotherapist, laboratory tests, and data obtained from whole body systems [6].

Treatment Options
Pharmacological
In the pharmacological treatment of fibromyalgia, it is aimed to reduce or eliminate the symptoms because both the etiology of the disease is not fully understood and there are many symptoms that affect many systems. If the patient's pain is severe, analgesics; for the disease is not fully understood and there are many symptoms that reduce or eliminate the symptoms because both the etiology of the disease and the pathophysiology of the disease are unknown. Analgesic treatment is not based on symptoms. The drug of choice is non-opioid analgesics for mild to moderate pain. For severe pain, opioids are used. The choice of analgesics depends on the patient's pain characteristics and the response to previous treatment [5].

In addition, Serotonin and Norepinephrine Uptake Inhibitors (SSRI), alpha-2 delta ligands, muscle relaxants, opioid derivatives, anticonvulsants, sleeping pills, non-steroidal anti-inflammatory drugs are among the options according to the patient's evaluation results and symptoms [5].

Behavioral and lifestyle changes
Cognitive-behavioral therapy approaches seem to be effective on the mood disorders and pain seen in fibromyalgia patients. In addition to these therapies performed in the context of specialized psychologists and psychiatrists in this field, studies such as hypnotherapy, belief models can also be shown as an option. Individuals may need to be supported by lifestyle changes such as eating attitudes, sleeping patterns and smoking cessation. The patient needs to actively participate in the treatment by providing and maintaining the necessary lifestyle changes [5-9].

Physiotherapy and rehabilitation
As mentioned before, the disease can hold different systems that can show different symptoms in each patient. The nature of the illness, the symptoms, the treatment options, the predicted problems should be explained in detail to the patient and his / her caregiver if exists [5].

In-water applications such as hydrotherapy have positive effects on the patients by water’s relaxing properties and resistance. Magnetotherapy, ultrasound, laser applications, ESWT applications in pain-intensive areas, and TENS applications in order to increase circulation, application of electrotherapeutic agents, EMG biofeedback and electroacupuncture can also be used for both pain and circulation enhancement as well as for relaxation.

Whole body or local vibrations, sensory integration therapies, music therapies, or combinations of these, for sensory problems or pain are frequently included in the fibromyalgia treatment plan by physiotherapists [2,5].

Exercise applications for exercise habits or symptoms constitute a large part of the cure. Both reducing the number of depressive symptoms by affecting the individual’s well-being and solving problems such as pain and sleep, as well as improving the function is also effective.

If the patient is willing, they should be encouraged and guided to do regular sports. In particular, sports or exercises done with the group will both reduce the symptoms of the disease and help the individual to social and psychological satisfaction. Correct and regular exercise has proven positive effects on all body systems [2,5-9].

Other Treatment Options
Although the low evidence level following approaches can be added to the fibromyalgia treatment plan [9]:

1. Phytotherapy
2. Homeotherapy
3. Nutritional supplements
4. Vitamin D supplement [3]
5. Acupuncture [4]
6. Melatonin

References