

## Fibromyalgia in the 21st century

The name Fibromyalgia (FM) means pain in muscles and fibrous connective tissues, such as ligaments and tendons. It is the most common cause of pain in the aforementioned places and one of the most frequent reasons for consultation in rheumatology.

In the past there was no clinical evidence that this disease existed, only the descriptions of the symptoms given by the patients were used. However, in the last 15 years, more defined guidelines have been established to aid diagnosis. Thus, it has been shown that people complain of general muscle pain in certain points, the so-called "tender points" and also generalized pain that covers various parts of the body.

FM is a chronic disease characterized by generalized musculoskeletal pain and in 66% of cases it is associated with Chronic Fatigue. The exact cause of the problem is unknown, but it is known that a combination of different factors can cause it, such as stressful situations, physical or emotional trauma, and hormonal changes.

Dr. Jaime Bravo, a Chilean rheumatologist, internationally recognized as a specialist in Joint Hypermobility Syndrome (JHS), explains that Fibromyalgia is not frequent in children, although that does not mean that they cannot suffer from it. In addition, he adds that it has a higher incidence in women (80%) than in men (20%) and there is a higher frequency between 20 and 50 years of age. Symptoms vary from day to day, depending on the time, weather, physical activity, poor sleep, or stress. It is not known why the pain is so variable, only that inactivity, stress and cold produce more stiffness in the joints and tendons, while exercise, deep sleep and heat relax, reducing pain.

### Fibromyalgia symptoms:

- Diffuse pain, in a large part of the body (it is the most important Sign together with Chronic Fatigue)
- Chronic Fatigue
- Joint stiffness
- Muscle contractures
- Pain concentrated in some points
- Sleep disorder, in quality and quantity (in 70% of cases)
- Headache
- Sensation of tingling and swelling in the hands
- Increased frequency of urination (due to bladder spasms)
- Painful menstrual periods, in some women
- Gastrointestinal problems (irritable bowel syndrome, reflux, etc.)
- Numbness of feet and hands
- Vertigo
- Depression (in 25% of cases)
- Anxiety
- Humor changes
- Lack of concentration and memory loss

There is no evidence that these symptoms worsen over time.

Dr. Bravo believes that there is a very close relationship between Fibromyalgia and Joint Hypermobility Syndrome (JHS) (see box), which is why he has dedicated the last four years to studying both diseases and in October 2004, he presented a paper on Joint Hypermobility at the American College of Rheumatology, Annual Meeting in San Antonio, Texas.

He finds interesting a study done in Israel of 338 children, from 9 to 15 years of age, in which 13% had joint hypermobility and 6% FM. Of the children with FM, 21% had hypermobility and 40% of those with hypermobility had FM, demonstrating a strong association between the two diseases. Dr. Bravo does not rule out that in some cases it is the same disease.

### Joint Hypermobility Syndrome (JHS)

JHS is an exaggerated increase in joint mobility and affects 10% of the world population. It is little known and diagnosed, but so similar to Fibromyalgia that they can be confused. In most cases there is excessive joint flexibility, but sometimes the patient may not be hypermobile. It also has associated problems such as early osteoarthritis, osteoporosis, varicose veins, hernias, prolapses, myopia, disc diseases, etc.

This disease is due to a hereditary alteration of the collagen fiber, which is the protein that forms the matrix of all tissues and if it is altered, it causes the tissues to be weaker and to wear, dilate or tear. Cysts, varicose veins, and aneurysms also form easily.

JHS is extremely common in Chile, and Dr. Bravo believes that it is the reason why children suffer constant injuries (sprains, tendinitis, subluxations, etc.) and athletes present musculoskeletal problems frequently.

Dr. Bravo believes that the symptoms of the two diseases are very similar and, in some cases, both can have the same type of pain. Among the important differences is that in JHS there are genetic factors and some special characteristics in the ears and nose and light blue sclera (when the white part of the eye appears bluish, especially in women, which does not cause any problem, but is useful for diagnosis).

If the diagnosis of Fibromyalgia is mistakenly made instead of JHS, you run the risk of not preventing a series of possible future problems, such as those mentioned above.

If, on the contrary, the diagnosis of JHS is established instead of FM, the professional does not believe that there are problems. He explains that the Brighton criteria, which is used to diagnose JHS, is much more precise and objective than the FM criteria and since it has only been known since the year 2000. He advises doctors to become familiar with the JHS symptoms, in order to make the correct diagnosis.

### Diagnosis

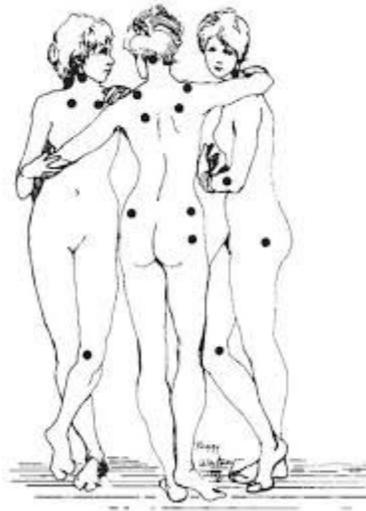
The diagnosis of Fibromyalgia, is an exclusion diagnosis. For this reason, the tests that are carried out are to rule out other pathologies, since there is no test that can be used to definitively discover Fibromyalgia. Its analysis is slow and difficult, because it requires a long history, a detailed physical examination, and knowledge of the other associated pathologies.

The American College of Rheumatology developed guidelines to diagnose Fibromyalgia, in 1990.

First criterion: Generalized pain in various parts of the body. They must be present for more than three months, ruling out other pathologies: they compromise the left and right side of the body, above and below the waist, cervical, thoracic or lumbar spine, or in the anterior thoracic region.

Second criterion: Pain to the pressure of the examiner, in 11 or more of the 18 specified areas (see drawing (Painful Points of Fibromyalgia)).

Fibromyalgia is characterized by 18 painful points (as noted on picture below) on the patient's body. If there is a pain reaction in at least 11 of them when gently pressed, it can indicate the disease.



However, according to Dr. Bravo, these painful points are non-specific, since they can also occur in other rheumatological conditions, "I personally attach less importance to the study of painful points, because other factors interfere, such as variability in the degree of pressure exerted on the painful area, the variability of the pain threshold, stress, the presence of tendinitis, bursitis, etc. It helps me much more to see what type of pain the patient presents, and especially the emotional overload with which he relates his discomfort".

Fibromyalgia, painful points.

The cost of the disease is high, due to the number of tests that must be performed. Some of them are: Hemogram, Biochemical Profile, Sedimentation Rate, Muscle Enzymes, Thyroid Function, Rheumatoid Factor, Antinuclear Antibodies and X-rays in symptomatic areas.

The disease does not cause joint deformity or compromise of the vital organs, but there is great emotional compromise, since the symptoms cause deterioration in the quality of life and, therefore, a loss in the joy of living.

## Treatment

Fibromyalgia does not have a definitive cure, but it can be helped by reducing pain and fatigue. The treatment includes analgesics; anti-inflammatories; muscle relaxants; exercise programs to improve flexibility; relaxation techniques; educational programs to manage pain; hot and cold treatments; massages; swimming pool (temperate if possible) or jacuzzi; ultrasound; electrical stimulation and psychological support.

It is advisable to continue being active and doing moderate exercises, such as swimming, Pilates and Yoga. Only in some cases is rest necessary, however, exercise above the physical capacity of the patient worsens the pain.

It is important to establish a schedule to sleep well and to avoid physical and emotional stress.

Due to the repercussion of mood in the disease and how difficult it is to face physical pain and worsening health, in our country there are support groups such as the Fibromyalgia Corporation of Chile (56 2 688 4726).

Prof. Jaime F Bravo, MD

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