



Gabrielle Shrier

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Pilates for Fibromyalgia

By Gabrielle Shrier

According to the National Fibromyalgia Association, Fibromyalgia Syndrome (FMS) is an increasingly recognized chronic pain illness characterized by widespread musculoskeletal aches, pain and stiffness, soft tissue tenderness, general fatigue and sleep disturbances. While the cause and etiology of FMS is unknown, the disease affects 6-12 million people in the United States: most commonly women (at a ratio of 9:1) between the ages of 25 and 50 years old.

Obtaining a true Fibromyalgia diagnosis is difficult since no objective diagnostic tests currently exist. The American College of Rheumatology established a tender point palpation diagnostic criteria in 1990. The presence of pain occurring in 11 out of 18 tender point sites and present for at least 3 months is required for diagnosis.

Common symptoms of FMS include:

- Sleep disturbances
- Morning stiffness
- Headaches
- Irritable bowel syndrome
- Painful menstrual periods
- Numbness or tingling of the extremities
- Restless legs syndrome
- Temperature sensitivity
- Cognitive and memory problems (sometimes referred to as 'fibro fog')

Traditionally, physical therapy has been shown to be helpful with the treatment of FMS and is best used with interdisciplinary therapeutic applications. The goal of physical therapy with FMS is education of the syndrome with instruction on limits and management. Exercises are important to maintain and improve function and assist in managing pain, therefore it is crucial to establish an independent home exercise program. Muscle energy techniques (MET) have been shown to be highly effective.

In a research study completed by Mary Silva, MET showed a noted 50% or more decrease in pain levels in 60% of patients, a decrease in the medications required, and improvements in quality of life. MET includes gentle stretching of the musculature with gentle contraction of that muscle. From this we can conclude that Pilates, based on its principles, can be very helpful in treating this population.

Important considerations when working with this type of population include compliance of the client, any co-morbid conditions, medications the client is taking or any other psychological components that may exist. Poor posture and a sedentary lifestyle have been reported to be great perpetuators of trigger points.

Additionally, the presence of “fibro fog” can have a significant impact on the client’s success with any home programming designed for them. It is imperative to write down all home exercise instructions and include as many descriptions and pictures as possible.

Individuals suffering from Fibromyalgia tend to fear that any exercise is going to make their pain worse. However, current research on Fibromyalgia and exercise shows that low impact aerobic exercise (if performed correctly) can be done without increasing pain. For some clients it can be effective in actually increasing their current pain threshold. A review study of aerobic exercise suggests beginning with short stints (3-5 minutes, 3 times a week) and progressing over time to at least 30 minutes, 4 times a week. As with any component of an exercise program designed for this group, gradual progression is key.

Few studies exist that have examined the effects of strengthening with the Fibromyalgia patient, but there are studies which have shown an improvement in strength, if not necessarily a decrease in symptoms. Over the years, we have had clients report an improvement in their overall sense of well-being, which they claim improves their ability to manage the aspects of this syndrome. Improvements in posture due to the nature of the Pilates work were also widely reported.

There are many reasons why using Pilates is effective for conditioning or rehabilitation of a client with Fibromyalgia. Pilates is a low impact program that focuses not only on core strength and stability, but the use of breathing and breath work. Breathing oxygenates blood and increases circulation to all regions of the body. With recent studies showing that breathing while incorporated during exercise can increase relaxation of muscles and thus avoid undue tension, the use of Pilates is a “no-brainer”.

A strong tendency for those suffering from Fibromyalgia is to “disconnect” from their body. Pilates’ emphasis on the connection of the mind to the body, can also be a huge benefit. Clients’ ability to participate in an exercise program from which there is no exacerbation of symptoms can greatly improve their sense of well being. From a musculoskeletal standpoint, it also allows for the improvement in articular mobility of the spine in a very gentle and supported environment.

Hypermobility has been reported to be an additional factor affecting clients with Fibromyalgia. There is a greater tendency for the muscles to rotate, causing imbalances and trigger points. (Travell and Simmons 1983)

Key areas of focus for this type of program design are primarily endurance, posture and managing fatigue. One strategy for optimizing the exercise experience for the client is timing their sessions earlier in the day. By starting the day with an oxygenating breathing-focused routine, the onset of fatigue can be pushed back in some cases.

Another very important consideration for this type of program design is to keep repetitions to a minimum. Unlike traditional stabilization programs, the issue of muscle endurance is paramount for

success. The muscles must be comfortable during all phases of any exercise, contraction and relaxation. This could mean that the speed of movement is cut in half for many of the Pilates exercises. It is important however, not to strain the structures by having the client move too slowly. A comprehensively trained Pilates instructor with 2-3 years of experience is strongly recommended as this disorder is multifaceted.

Because of the individualized nature of this disorder, it is often intimidating when designing a program for a client with “so many variables”. This is in fact why the Pilates method is so appropriate for this population. The individualized nature of Pilates and its specificity, in combination with such a wide range of equipment versatility, is what makes it so beneficial.

Clients with FMS will improve best with personalized programs, which can be accomplished with Pilates. The focus should be on gentle stretching exercises and focus on deep, core stabilization work for both pelvic and scapula stabilization.

Generally mat work may be too challenging as a starting point for clients with Fibromyalgia. Because it lacks the support and proprioceptive associated with the Reformer and the Trapeze table, mat work can result in excessive stress to the muscles and joints resulting in a poor movement experience for the client. There do exist some modifications and simplifications to mat exercises, which are appropriate and can be incorporated into a home program.

Some good mat exercises include:

- Theraband LE stretching and chest opening
- Neutral pelvis
- Grounding
- Pelvic clocks
- Bridging
- Bent knee fall outs
- Heel slides
- Knee folds
- Chest lifts
- Ribcage arms
- Spine stretch forward
- S/L leg work
- Standing footwork

A gentle, modified Reformer workout might include:

- Footwork in neutral pelvis

- Arm circles
- Leg in strap work
- Short spine
- Arm work seated on the long box
- Rowing
- Stomach massage
- Spine stretch forward (bi/unilateral)
- Eve's Lunge
- Mermaid

The Trapeze table is also a good location to work since the patient feels more stable and the springs can be made as light or heavy as needed by moving the bar. Many clients are started here to ease them into the idea of doing exercises without them feeling intimidated.

Exercises include

- Supine arms with tower bar
- Supine arm work
- Leg in strap work
- Mini-swan
- Mini-reverse tower
- Supine arm work
- Leg in strap work
- Mini-swan
- Mini-reverse tower

The most important thing to remember when working with this type of population is that little will be achieved rapidly and time is a large part of the equation. Gains will be made slowly and there will most likely be setbacks. If clients express frustration, it is important to educate them that even if their pain level is staying somewhat the same, they are getting stronger. That IS improvement.