

Myofascial Pain

Overview

An Integrative Health approach to myofascial pain incorporates nutrition, yoga, tai chi, meditation, dietary supplements, massage, and other integrative and complementary practices.

Integrative Health emphasizes mindful awareness and patient self-care along with conventional and integrative approaches to health and well-being. The Circle of Health highlights eight areas of self-care: Physical Activity, Surroundings, Personal Development, Nutrition, Recharge, Family Friends, & Co-Workers, Spirit & Soul, and Mind & Emotions. The narrative below shows what an Integrative Health clinical visit could look like and how to apply the latest research on complementary and integrative health to myofascial pain.

Meet the Patient

Jennifer is a 37-year-old woman with a diagnosis of fibromyalgia syndrome who would like to talk about further treatment options for her chronic pain. She was diagnosed with fibromyalgia seven years ago. Prior to that, she intermittently had episodes of mild depression that resolved without medications, and she also suffered from frequent migraine headaches. She developed pain in her neck, back and both legs, which persisted. This was associated with headaches, persistent fatigue, and non-restorative sleep. Previous treatments have included gabapentin, amitriptyline, nonsteroidal anti-inflammatory drugs (NSAIDs), Tylenol, and intermittent short acting opioids. She is frustrated because none of these have made her pain go away. She liked the opioids the best but admits that they did not relieve her pain much either.

Personal Health Inventory

On her Personal Health Inventory, Jennifer rates herself a 1 out of 5 for her overall physical well-being and a 1 for overall mental and emotional well-being. When asked what matters most to her and why she wants to be healthy, Jennifer responds:

"My 2 kids and my parents matter the most to me in my life. Spending time with my 2 kids, swimming, and solving problems bring me a sense of joy and happiness."

For the eight areas of self-care, Jennifer rates herself on where she is, and where she would like to be. She decides to first focus on the areas of Family, Friends, and Co-Workers and Mind & Emotions by spending more time with her children and enrolling in a meditation course.

For more information, refer to Jennifer's PHI.

Introduction

Myofascial pain can be either a regional or a diffuse pain syndrome. **Regional myofascial pain** is caused by trigger points, which are discrete, hyperirritable spots in a taut band of muscle.¹ These points are tender to palpation and can produce a characteristic referred pain pattern.¹ **Fibromyalgia syndrome** involves multiple tender areas and is associated with systemic

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symptoms, most commonly fatigue and sleep disorders. The tender points with fibromyalgia are typically numerous but do not have associated referred pain patterns. Patients with fibromyalgia can have discrete trigger points, however.² Treatment of trigger points mostly involves modalities aimed at deactivating the symptomatic trigger point. Fibromyalgia, on the other hand, requires a comprehensive approach and remains a treatment challenge. This review will focus mostly on an Integrative Health approach to fibromyalgia.

Fibromyalgia is a relatively common syndrome that carries an enormous burden for patients. In the United States, 15 million patients are affected, with an overall prevalence of 2%.³ Patients with fibromyalgia score lower on quality of life measures than patients with rheumatoid arthritis, COPD, or insulin-dependent diabetes.^{4,5} In addition, the direct cost of fibromyalgia is more per patient than rheumatoid arthritis.⁵

There is increasing research support for a multifactorial etiology in fibromyalgia, including underlying genetic and biologic factors, environmental triggers, and neurologic sensitization.⁶ Significant physical or emotional stressors such as physical trauma or deployment have been implicated as potential syndrome triggers.⁵ Infections and other pain problems are also triggers. Fibromyalgia is thought to be a disorder of central pain processing, with a core feature being a lowered pain threshold.⁵ Several other disorders share this characteristic hyperalgesia and are likely on a spectrum with fibromyalgia. Examples include chronic fatigue syndrome, chronic headaches, irritable bowel syndrome, and vulvodynia.⁵ These conditions commonly co-exist and add to the complexity of managing fibromyalgia. In addition to adaptive nervous system changes, the pain experience in fibromyalgia is further influenced by a person's psychological and emotional state.⁷

Conventional medical treatments involve medications, exercise, and management of co-existing psychiatric diagnoses. Initial pharmacologic management may involve pain control and antidepressant medications. In terms of analgesia, recommendations normally begin with acetaminophen and nonsteroidal anti-inflammatory drugs (NSAIDs). These are generally regarded as the safest medications but are certainly not without risk. Acetaminophen carries the risk of hepatotoxicity, and NSAID medications cause gastrointestinal bleeding, interfere with platelet aggregation, can worsen renal function, and may increase risk of cardiovascular events.⁸ Opioid medications may be considered an option but are under increasing scrutiny due to their multiple adverse effects, risk of addiction, and lack of functional improvement compared to non-opioid analgesics.⁹ One of the many possible adverse effects with opioids is hyperalgesia, which is concerning in a fibromyalgia patient who already has some degree of hyperalgesia.¹⁰

In general, opioid medications are considered a poor treatment option in fibromyalgia.

The antidepressant medications most commonly used in fibromyalgia are tricyclic and serotonin-norepinephrine reuptake inhibitor (SNRI) antidepressants. Serotonin-specific reuptake inhibitor (SSRI) medications are used less often, as they have less of an effect on norepinephrine, although this varies based on the specific medication.⁵ Tricyclic antidepressants and SNRI medications have been shown to reduce pain by an average of 26%.⁵ Although tricyclic antidepressants have long been a treatment option for fibromyalgia, the overall level of evidence to support its use is low.¹¹ Tricyclics are also recommended as

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adjunctive treatments for both nociceptive and neuropathic pain.⁸ The benefits of tricyclic antidepressants in fibromyalgia are normally seen at low doses, typically 10-30 milligrams of amitriptyline.¹² Risks include sedation, and this drug class is on the Beers list of medications to be used cautiously in the elderly.¹³ With SNRI medications, duloxetine has evidence of benefit in fibromyalgia, however venlafaxine does not. Pregabalin (*Lyrica*) is another medication approved for use in fibromyalgia. It has similar efficacy to the other medications.

Although medications lead to improvement in some patients, conventional medical approaches are limited in scope and success in treating fibromyalgia. Chronic pain is a frustrating problem for both patients and clinicians. Patients turn to complementary therapies for fibromyalgia pain more than any other diagnosis.¹⁴ Physicians cite chronic pain as a top reason for labeling patients as "difficult."¹⁵ Broadening the treatment goals and therapeutic options has the potential of improving both patient and clinician satisfaction in approaching this challenge, a problem for which the Integrative Health approach can be extremely useful.

Self-Care

Physical Activity

Movement is often limited in patients with fibromyalgia, leading to a cycle of deconditioning, weakness, stiffness, hyperalgesia and, therefore, further reductions in movement. Breaking this cycle with some form of an exercise prescription is a vital part of a therapeutic plan in fibromyalgia. In fact, exercise may be the treatment with the most evidence for benefit in treating fibromyalgia. It has "gold level" evidence for effectiveness in a 2007 Cochrane review, and other systematic reviews also support effectiveness. Exercise has also been found beneficial for chronic fatigue syndrome, which is thought to have a similar underlying pathophysiology. 19,20

Exercise can affect pain on multiple physiologic levels, making it an ideal treatment modality. Exercise can improve aerobic capacity, strength, and flexibility. This combination can lead to increased functional capacity over time. Exercise itself can alter pain perception, inducing hypoalgesia to new pain stimuli following both aerobic and strength training. In individuals with chronic pain this is best demonstrated at low to moderate intensity training. Exercise is also known to have effects centrally, improving sleep and depressive symptoms. Sleep and mood disturbances commonly coexist with fibromyalgia and affect pain perception, making them excellent targets for treatment.

Movement therapies represent a diverse group of interventions. Traditional exercises include generalized aerobic training (walking, running, biking, swimming, etc.), strength training, and joint-specific flexibility programs. Other disciplines such as yoga and tai chi incorporate multiple aspects of fitness and also include mind-body components. In fibromyalgia, aerobic exercise may be the modality of choice. There is evidence that aerobic exercise is superior to strength training, however both can be effective in the treatment of fibromyalgia. The type of exercise does not impact adherence to a program. Exercise prescriptions should take into account a person's current functional status, treatment goals, and interests. For guidance on tailoring exercise to individual needs, refer to "Prescribing Movement."

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Both aerobic exercise and strength training are recommended in fibromyalgia patients, so ideally exercise goals should take both of these aspects of fitness into account. The American College of Sports Medicine recommends addressing exercise frequency, intensity, time of the activity, and type of activity when making exercise recommendations. In addition, they recommend a minimum of 150 minutes of aerobic activity per week. For the majority of patients with fibromyalgia, this may not be reasonable. Starting slow with an exercise program is sound advice for anyone, but this is of increased importance in patients with chronic pain. Exercising at too high of an intensity has the potential of worsening pain perception in patients with fibromyalgia pain. Working with patients to find an exercise frequency and intensity that does not flare pain is important.

"Slow and persistent" is the mantra for exercise for fibromyalgia. If someone can only walk 100 yards this week, shoot for 120 yards next week. If they can exercise for five minutes today, perhaps they can exercise six minutes tomorrow.

"Mindful movement" disciplines can be appealing exercise options for fibromyalgia patients. They can be gentler in their approach, include components of mindful awareness, and have supportive research in fibromyalgia as well as other chronic pain conditions. Tai chi is a gentle movement discipline that is often used by patients with arthritic conditions. A controlled trial of 66 fibromyalgia patients showed improvement in quality of life scores after a 12 week tai chi program that were maintained at 24 weeks. Yoga is commonly practiced across the United States and has a growing research base for use in a variety of pain conditions. Yoga has been shown beneficial in chronic low back pain and chronic headaches, which are common in the fibromyalgia population. Yoga has been shown beneficial in chronic low back pain and chronic headaches, which are common in the

While not a specific exercise per se, teaching patients about self-awareness in movement and patterns facilitating pain can also promote improvement in pain. The Alexander technique is a method of teaching the self-awareness of excess muscular tension during activities. A large study conducted in patients with chronic low back pain showed improvement in low back pain with Alexander technique instruction in addition to exercise prescription.³⁰

Using a perceived exertion scale is a tool that can give a goal despite the level of fitness. On a scale of 1 to 20 where 1 is resting on a couch and 20 is exercising to the point of exhaustion, encourage movement at a perceived exertion of 14. At a "14", you can talk, but you cannot sing. Encourage sustaining the "14" for 20 minutes or longer when able.

Nutrition

Improving nutrition may benefit fibromyalgia patients on several fronts. First, people with fibromyalgia are more likely to be overweight or obese than the general population.³¹ Reducing weight has been found to improve musculoskeletal pain. Proposed underlying physiological mechanisms for fibromyalgia include oxidative stress and mitochondrial dysfunction,³¹ so diets higher in antioxidants and lower in pro-inflammatory components have been found to improve symptoms.^{32,33} Finally, dietary choices can affect pain indirectly through improvements in mood, energy level, and sleep.

Vegan and vegetarian diets have been the primary nutritional patterns found to be beneficial in fibromyalgia. Although studies have been small, they have shown promising results. The

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proposed mechanism behind the success of these studies has been the increased intake of antioxidants.³¹ A Mediterranean-style diet has been found beneficial for many aspects of health and is thought to be a healthful approach to nutrition, but as of yet, it does not have evidence of effectiveness in fibromyalgia.³¹ Similarly, Elimination Diets are sometimes recommended to fibromyalgia and chronic fatigue patients. Although avoiding symptomatic triggers makes empirical sense, at this point supportive evidence is lacking.³¹ Arguments could be made for any of these dietary strategies, but currently physicians can have the most confidence in recommending a trial of a vegetarian diet or Mediterranean diet as part of a fibromyalgia Personal Health Plan.

Recharge

Fatigue is central to the overall picture of fibromyalgia, and comorbid sleep disorders are common. The precise role of sleep within the underlying pathophysiology of fibromyalgia is not understood, but the relationship appears to be bidirectional. Sleep disorders appear to exacerbate myofascial pain, and pain worsens sleep.^{5,34} Sleep disorders are also one of the targets for pharmacologic therapies, as most medications used for fibromyalgia have the side effect of sedation, which possibly contributes beneficial effects. Sleep and fatigue are multifactorial problems requiring an approach more comprehensive than pharmacologic therapies alone, especially given the limited success and adverse effects of medications.

Sleep and pain are bidirectional. With more pain, sleep quality suffers. As sleep quality suffers, people often experience more pain.

Fortunately, many of the recommendations for improving overall health can affect sleep and energy in positive ways. Improving nutrition and encouraging daily exercise as discussed in the above sections may improve energy levels. An attempt should be made to optimize evening sleep hygiene habits. Supplements with beneficial effect on sleep may be considered, such as melatonin and valerian. Psychological interventions, such as cognitive behavioral therapy (CBT), have shown promise improving the sleep-related symptoms of fibromyalgia patients. Psychological interventions have the added benefit of addressing any comorbid depressive symptoms and trying to improve coping skills. For ideas on how to improve sleep, refer to "Recharge."

Family, Friends & Co-Workers

The negative effects of chronic pain reach beyond an individual, negatively affecting relationships. It may be helpful to educate a family member or friend about the diagnosis, treatment plan, and desired lifestyle changes. The additional education can hopefully serve to enhance communication between the patient and his or her loved one, muting the effect of chronic pain on their relationship. In addition, this provides another layer of support for healthy eating, movement, and other lifestyle changes.

Spirit & Soul

Spirituality is not a typical focus of most physicians' patient assessments, but it is quite important when discussing an Integrative Health approach to pain. Asking "What gives you a sense of meaning or purpose?" or "What is it that makes you feel a part of something bigger than yourself?" can be practical ways of framing the discussion. First, and most importantly, this

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can focus individuals on why they want better health. Pain-related functional goals can be tied to these big picture goals, giving more meaning to a patient's treatment plan. Second, a person's spiritual practice or sense of meaning may have a direct impact on her or his pain. Spiritual practices can improve a person's sense of control, enhance coping skills, and decrease the impact of stress. These are all factors that color the pain experience. In addition, many spiritual practices involve a community of individuals, providing a network of social support. Overall, participating in activities that contribute to a sense of purpose or connectedness can improve a person's pain experience. For more information, refer to "Spirit and Soul."

Mind & Emotions

There are multiple mind-body interventions that may be of benefit in fibromyalgia, including psychotherapy, meditation, relaxation, imagery, hypnosis, and biofeedback. Some mind-body therapies include a movement component; tai chi and yoga may be classed as movement-based mind-body therapies. Using mind-body interventions directly addresses the component of central-mediated pain in fibromyalgia.³⁷ In addition, therapies targeted at a patient's psychosocial experience could be hypothesized to affect both pain perception and related psychological symptoms, such as depression or anxiety. Overall, this is an important category of therapies to discuss with patients, because they may improve not only pain, but also mood-related symptoms, stress management, and illness-related coping skills.

There are several mind-body therapy trials and reviews specific to fibromyalgia patients. A systematic review that collectively reviewed multiple mind-body therapies for fibromyalgia showed improvement in self-efficacy and coping skills, with less evidence of improvement in pain.³⁸ Mind-body therapies show promise when compared with wait-list controls, but they are not as efficacious as exercise. In this light, approaches that include movement may be a good option for patients. In a systematic review of movement-based mind-body therapies in fibromyalgia patients, yoga has been found to improve pain, fatigue, depression, and quality of life measures.³⁹ Tai chi has been found to improve sleep, but not pain, in fibromyalgia.³⁹

The best mind-body therapies for fibromyalgia are combined with movement. Examples include yoga and tai chi.

A meta-analysis of psychological interventions was supportive of cognitive-behavioral therapy for pain reduction in fibromyalgia, with a moderate effect noted.³⁵ Controlled trials of mindfulness-based stress reduction have shown improvements in quality of life, coping skills, and depressive symptoms, although the trial results have been mixed.⁴⁰⁻⁴²

Since there are several mind-body therapies with supportive evidence for use in fibromyalgia patients, recommendations can be tailored to individual preference, community resources, and potential impact on co-existing symptoms.

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Dietary Supplements & Herbal Medicines

Note: Please refer to the <u>Passport to Whole Health</u>, Chapter 15 on Dietary Supplements for more information about how to determine whether or not a specific supplement is appropriate for a given individual. Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Overall, there is no evidence of benefit for supplements used in isolation for fibromyalgia. Evidence does exist for the use of supplements for specific associated symptoms. In many ways, this makes discussing supplements in fibromyalgia more challenging. The list of potential supplements is quite long, given the many symptoms associated with the syndrome. Conflicts of interest may arise from providers who sell dietary supplements as part of their practice. Most importantly, it is common for patients to overly focus on supplements because it is "easier" than addressing lifestyle changes.

When discussing supplements with patients, it is recommended they be discussed as part of a holistic approach, as opposed to a solitary treatment solution. Also, it is important to be critical of the supplement brand and source to improve the likelihood of getting the desired dose of a product.

Omega-3 Fatty Acids

Omega-3 supplementation has been shown to be beneficial in pain, but efficacy is more established for inflammatory pain conditions, such as rheumatoid arthritis.⁴³ It is not clear that the pain modulatory effects seen in other conditions are applicable to fibromyalgia. Omega-3 fatty acids do have other potential health benefits, however, such as reducing a patient's overall cardiac risk.

Vitamin D

The relationship between vitamin D deficiency and chronic pain is intriguing but not yet clear. Epidemiologic studies have correlated low vitamin D levels and chronic musculoskeletal pain. Prevalence in one study exceeded 90%. 44,45 Vitamin D deficiency is known to cause osteomalacia and a resultant dull, achy pain which can be either localized or widespread. In addition, vitamin D deficiency is associated with muscle weakness and increased falls. Despite the high correlation and a plausible mechanism of contributing to pain states, as well as a smaller 2013 study of Veterans that found that vitamin D improves pain, sleep and quality of life, a 2015 Cochrane review found vitamin D supplementation in chronic pain is no better than placebo. At this time, it seems reasonable to test vitamin D levels in patients with chronic pain also at risk for deficiency, and institute a trial of supplementation with low levels. Currently, evidence does not support empiric vitamin D supplementation in chronic pain patients.

Although the evidence is not clear, checking and restoring vitamin D levels in those who are deficient is a simple task that may provide improvement in pain severity while also having other health benefits.

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Magnesium

Magnesium deficiency appears to be more common in patients with fibromyalgia, and deficiency is correlated with fibromyalgia symptoms. Supplementation with magnesium citrate has been shown to reduce the intensity of fibromyalgia symptoms. Magnesium supplements can be calming for some patients, so it can be useful to take them before bed.

A dose of 400-800 milligrams of supplement is often recommended. Magnesium oxide should be avoided as a supplement due to its laxative effects. Dietary sources of magnesium include whole grains, spinach, almonds, soybeans, and avocados.

S-Adenosylmethionine (SAM-e)

This is an intriguing supplement option, given its more common uses for pain relief in osteoarthritis and improvement in mood. It is not yet known whether the pain relieving effect in osteoarthritis extends to myofascial pain. While there is not yet data to support use in fibromyalgia, it is an option for people with concurrent depressive symptoms. One drawback is that it is expensive to use and not usually on formularies.

Sleep-Related Supplements

Sleep is important to address in fibromyalgia, and as discussed above, it is often dysfunctional. There are many aspects to addressing healthy sleep, but some supplements may be beneficial. Some to consider are melatonin, valerian, and passionflower. More details are available in "Improving and Maintaining Healthy Sleep Habits".

Energy-Related Supplements

In some patients it may be useful to actively try to boost energy levels. This may be useful in helping patients have the energy to exercise. A general class of herbal medications with this property is known as the adaptogens. Examples to consider include rhodiola and ashwagandha. There is not data on these herbs specifically related to fibromyalgia.

Complementary Approaches

Manual and Manipulative Therapies

Manual therapies encompass a diverse group of techniques and providers. The common goal of these approaches is to normalize structure in order to improve function. Manual therapy techniques are practiced by osteopathic physicians, chiropractors, physical therapists, and massage therapists. High velocity, low amplitude (HVLA) thrusts, soft tissue mobilization, muscle energy, strain-counterstrain, myofascial release, and craniosacral therapy are all potential techniques employed by manual medicine clinicians. The most common application of these techniques is to improve pain and musculoskeletal function, so they are often applied to the fibromyalgia patient population.

Osteopathic physicians and chiropractors practice spinal manipulative therapy. This is most often associated with HVLA thrust techniques, although several techniques are typically used in conjunction attempting to improve function. Multiple mechanisms of action have been proposed, although it is not clear what most contributes to improved outcomes. Gapping of facet joints, improved joint range of motion, and activation of spinal stretch reflexes are all thought to play a role.⁴⁹

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In fibromyalgia, isolated treatment with manipulative therapies is not supported by current evidence. Specifically, chiropractic spinal manipulation has not been shown to provide benefit in the fibromyalgia population.^{50,51} However, spinal manipulation may be helpful in the treatment of myofascial trigger points and other pain syndromes which may coexist with fibromyalgia, such as chronic low back pain.^{52,53} Massage therapy has shown some promise for symptom relief in fibromyalgia, especially in the short term.⁵⁴ In order to achieve ongoing benefits, one to two treatments per week are recommended. Despite the limitations, patients may find manual therapies helpful for short-term symptom relief, which may improve adherence to exercise programs.⁵⁵

Acupuncture

Acupuncture stems from traditional Chinese medicine (TCM), with a history of more than 2,000 years of use. TCM is a holistic system encompassing acupuncture, herbal medicine, nutrition, meditative practices (qi gong), and movement (tai chi). TCM is based on the belief that health is maintained by balancing two opposing forces, yin and yang. Yin is the cold, slow or passive force, and yang represents the hot, excited or active force. Fin and yang balance is managed by qi, the body's vital energy source, believed to flow in channels throughout the body. Disease results from an imbalance of yin and yang with resultant blockages in the free flow of qi. The goal of TCM modalities is to restore and maintain the balance of yin and yang. Acupuncture stimulates points on the body, usually with needles, altering the flow of qi attempting to achieve this balance. Even though acupuncture represents one piece of TCM, it is often practiced as an independent therapy.

Recommending acupuncture may make some clinicians uneasy because the theoretical basis of yin, yang, and qi does not relate to a modern understanding of human physiology or pathology. However, basic science research has uncovered multiple mechanisms of action that likely contribute to acupuncture's physiologic effect. Needling an acupuncture point stimulates the natural endorphin system, altering the pain sensation. This effect is reversible with naloxone. Serotoninergic systems also seem to be involved centrally. Multiple chemicals released peripherally appear to influence acupuncture analgesia, including interleukins, substance P, and adenosine. A local anesthetic injected around a peripheral nerve at an acupoint blocks acupuncture's analgesic effect. The gate control theory suggests that modulation of sensory input at the level of the dorsal horn of the spinal cord also plays a role. Taken together, acupuncture likely has mechanisms of action in the brain, spinal cord, and at the periphery, making it a truly unique therapeutic modality. It remains controversial how these mechanisms interact and how they could have persisting effects on chronic pain.

There are a large number of studies assessing acupuncture in pain, but only a small number are specific to the fibromyalgia population. Systematic reviews in 2007 and 2010 showed that acupuncture did have short-term pain relief in fibromyalgia patients, but this effect was not sustained at follow-up. ^{59,60} Also noted was a high risk of bias in the studies. A more recent Cochrane review in 2013 demonstrated low to moderate level evidence of benefit for acupuncture compared with no treatment at one month post-treatment. ⁶¹ Of note, there was also evidence of benefit in sleep and global well-being, as well as for pain and stiffness measures. Acupuncture has evidence of benefit in the treatment of conditions commonly seen in conjunction with fibromyalgia, including headaches, low back pain, functional gastrointestinal disorders, and sleep disorders. ⁶²⁻⁶⁵ The combination of short-term pain relief, improvement in

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sleep, and potential to treat coexisting conditions make acupuncture an appealing adjunctive treatment modality for fibromyalgia.

Back to Jennifer

Jennifer determined the following initial health goals:

- Focusing her limited energy on things that make her happy
- Improving her pain control, even if she cannot be completely cured
- Improving the quality of her sleep
- Gradually building her daily energy reserves

She agreed that a multi-faceted approach was the best and that she needed to find ways to enjoy herself now, in the moment, as opposed to continuing to put her life on hold until some point in the future when her pain goes away. She resisted pursuing exercise, but it was stressed how important this aspect of treatment is. She agreed to start walking five minutes per day. She was interested in how acupuncture might address multiple aspects of her symptoms, even if it meant only temporary relief. She was referred to an acupuncturist for further treatment. Given her interest in relaxation exercises, she was also referred for a class on mindfulness meditation. Between the exercise and mindfulness, the hope was that she would be able to take better control of her symptoms. She also agreed to join a fibromyalgia support group to learn how others deal with issues similar to hers.

In terms of medications and supplements, she elected to restart a tricyclic antidepressant, as this had the best evidence among conventional treatments. Nortriptyline was chosen based on its better side effect profile. She was also started on vitamin D and magnesium supplements. In order to improve the quality of her family time, she decided to schedule some time with her children in the mornings when her energy level was better. She agreed to more regular follow-up with her care team to increase her chances of achieving her new goals.

Personal Health Plan

Name: Jennifer

Date: xx/xx/xxxx

Meaning, Aspiration, Purpose (MAP):

What is meaningful to me is to be able to be active with and take care of my children.

My Goals:

- Focus my limited energy on things that make me happy.
- Improve my pain control, even if this means it will not be cured.
- Improve the quality of my sleep.
- Gradually build my daily energy reserve.

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Strengths (what's going right already)/Challenges:

- I have a loving family and two beautiful daughters.
- I have a home that I am proud of.
- I am a productive employee and I may be able to work again in the future.

My Plan for Skill Building and Support

Mindful Awareness:

Being aware of the love I have for my daughters and family will help give me the energy needed to make these positive changes

Areas of Self-Care:

- Physical Activity
 - Start walking 5 minutes a day. Once I am walking more regularly, work on getting back in the pool to swim since it brings me joy.
- Surroundings
 - o I have a home that I like this is important to my overall health.
- Personal Development
 - I enjoy solving problems but currently do not have enough energy to do this. I will start to think of what activities or work I could pursue that would allow me to do more problem solving.
- Nutrition
 - Continue to eat multi-colored whole foods, including vegetables, fruits, and whole grains. Good sources of protein are beans, nuts, fish, and lean meat. Avoid excess inflammatory foods such as red meat, dairy, and sugar. Minimize sweets and "white" foods such as bread and pasta.
- Recharge
 - Start nortiptyline 25 mg at bedtime to improve sleep and reduce my pain severity.
 Getting more movement during the day will also help my sleep.
- Family, Friends, and Co-Workers
 - Join the fibromyalgia support group we discussed. Plan on spending time with my kids in the morning when I have the most energy.
- Spirit and Soul
 - Since leaving my job, my life does not have much purpose. Let's start by focusing on my children. With time, I hope to find the energy and confidence to explore working again.

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- Mind & Emotions
 - I'm interested in improving my relaxation skills. I will enroll in a Mindfulness Meditation class.

Professional Care: Conventional and Complementary

- Prevention/Screening
 - o Consider keeping a journal to learn what is associated with good and bad days
- Treatment (e.g. conventional and complementary approaches, medications, and supplements)
 - Medications
 - Nortriptyline 25 mg at bedtime
 - Magnesium citrate 500 mg daily
 - Testing
 - 25-Hydroxy Vitamin D level
- Skill building and education
 - Mindfulness Meditation class

Referrals/Consults

Acupuncture

My Support Team

- Principal Professions
 - o Primary care clinician
 - Acupuncturist
- Personal
 - My children
 - My parents

Resources

- The American Fibromyalgia Syndrome Association, Inc.
- American Chronic Pain Association
- American Academy of Pain Management
- University of Wisconsin-Madison, Integrative Medicine: patient handouts

Author(s)

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