Managing Joint Pain with Autoimmune Disease

Joint pain accompanied by autoimmune disease can have many causes, but exercise, diet, physical therapy and alternative treatments can ease symptoms.

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MOST CHRONIC JOINT pain can be classified as arthritis (painful inflammation and stiffness of the joints) or a related disease, of which the Arthritis Foundation indicates there are more than 100 forms.[1] Some conditions such as rheumatoid arthritis (RA) and psoriatic arthritis are autoimmune and inflammatory diseases, while other autoimmune diseases such as lupus lists arthritis as one of the common symptoms (Figure 1). Osteoarthritis (OA), involving wear and tear to a joint's cartilage, is the most common form of arthritis, and it is prominent in the hands, hips and/or knees of the general population, particularly in those over 50 years old.

According to a Centers for Disease Control and Prevention (CDC) report published Oct. 8, 2021, based on surveys conducted as part of the National Health Interview between 2016 and 2018, it is estimated that almost one out of every four U.S. adults — or about 58.5 million people — have been diagnosed with general arthritis, RA, gout, lupus or fibromyalgia. This prevalence has increased by 4.1 million people from CDC's previous estimates from the years 2013-2015. Researchers furthermore projected that the activities of 25.7 million people — 44 percent of those with arthritic conditions and 10 percent of all U.S. adults — are limited due to joint stiffness and pain.[2]

Whether the cause of someone's joint pain is due to an autoimmune condition or whether someone with an autoimmune condition is living with joint pain caused by some other cause, the challenge of working through the discomfort to perform day-to-day activities can be very real.

Physicians will consider, or help to determine, someone's cause of joint pain before recommending a plan of care. If the pain is related to OA, caused by the wear and tear of a joint over time, a nonsteroidal anti-inflammatory (NSAID) medication such as ibuprofen (Advil) or naproxen (Aleve), corticosteroids or other prescription pain relievers may be utilized. These medications, in addition to oral disease-modifying antirheumatic drugs (DMARDs) such as methotrexate and/or intravenous or injectable biologic agents, can also be used to treat inflammatory arthritis related to an autoimmune disease. Caution should be taken, however, because both DMARDs and biologics can both suppress the immune system and leave people more vulnerable to infections.

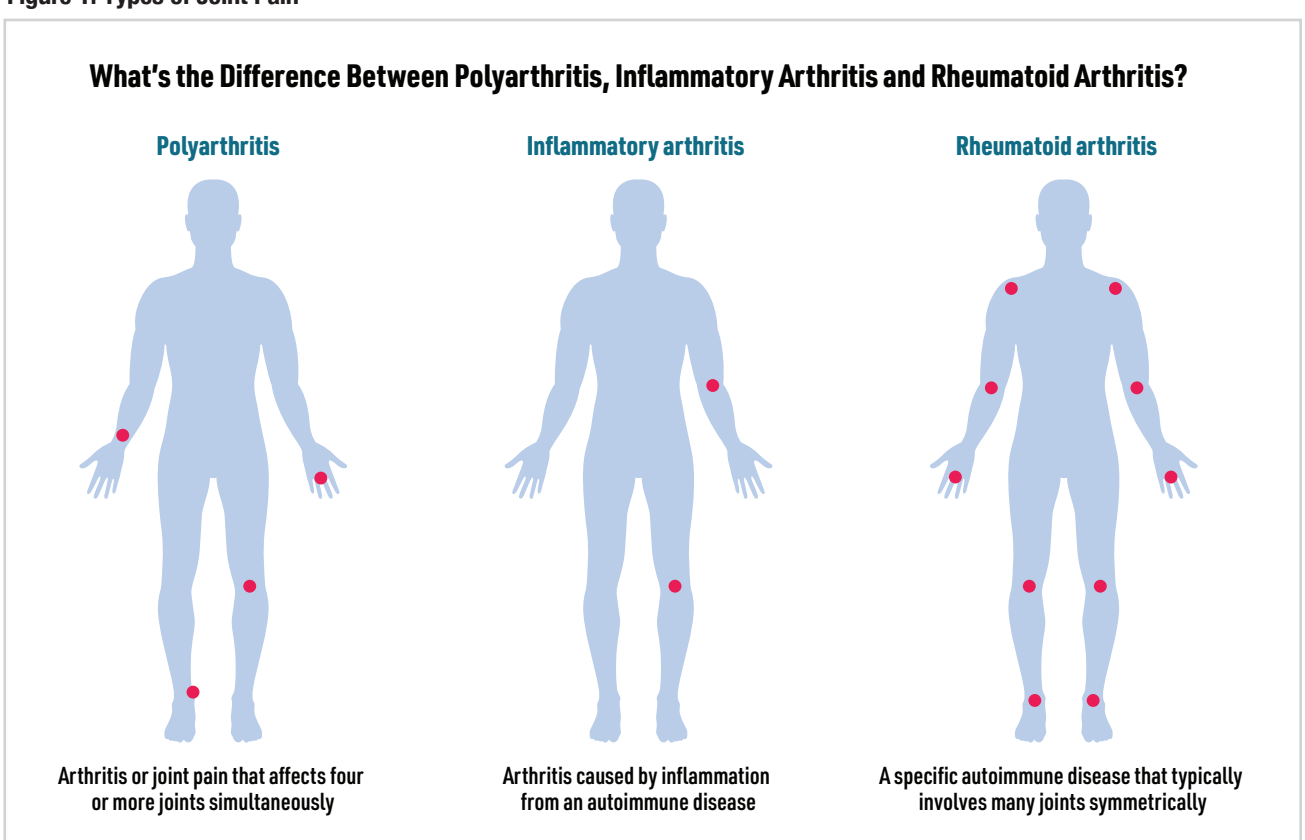
With arthritis, joints can become so damaged that medical professionals may recommend total joint arthroplasty (a.k.a. joint replacement). But, this isn't an easy decision for someone with an autoimmune condition due to increased conventional risk factors related to the procedure. Nevertheless, evidence generally supports the view that joint replacement can be performed safely for patients with most autoimmune conditions, including inflammatory rheumatic diseases, as long as careful risk evaluation is performed on a multidisciplinary basis.[3]

Fortunately, alternatives to surgical intervention are available to help control pain and other symptoms and serve as a more conservative initial response. These include healthy lifestyle changes, skilled therapy and alternative therapies.

The Role of Diet

When arthritis is related to an autoimmune condition, pain can be complicated by other related issues, including fatigue, fever, swelling and weakness. And, one of the most important steps someone can take to help control symptoms is to control diet.

Figure 1. Types of Joint Pain



Research indicates smoking and certain foods and beverages that can contribute to inflammation should be avoided. Items that should be left off the menu, or at least taken in moderation, include those that are rich in added sugars, salt, saturated fat or omega-6 fatty acids (including corn, peanut, safflower, sunflower and soy oils) and those that are highly processed/refined or fried. Dairy products, alcohol and gluten, a protein found in grains such as wheat, barley and rye, may also contribute to inflammation in some people.

Because many cuts of red meat are high in saturated fat and omega-6 fatty acids, red meat is often the poster child of inflammatory foods to avoid. Although lean cuts may not be as harmful, alternative protein sources such as some fish that are high in omega-3 fatty acids (e.g., salmon, tuna, sardines and mackerel) could actually help reduce inflammation.

In addition to the possibility of causing a flare-up, many of the foods and beverages mentioned previously can put individuals at higher risk of gaining weight, putting more pressure on painful joints and overworking other body systems that may be impacted by an autoimmune disease.

Besides fish, the following foods and beverages are also often heralded for their potential anti-inflammatory characteristics:

- Dark leafy greens
- Nuts
- Grapes and berries
- Beans
- Olive oil
- Garlic and onions
- Ginger and turmeric
- Tea
- Tart cherry juice

The Role of Exercise

Although pain and stiffness can impede activity, it is important to keep moving to prevent the loss of mobility and continued pain. Staying physically fit and at a healthy weight will also help to reduce additional load on the joints and other complications related to obesity, as well as contribute to positive mental health. See Figure 2.

Figure 2. Managing Joint Pain

Maintaining a balance between rest and activity can be difficult, so keeping an exercise journal to record one's response to activity is a useful tool. Overdoing it can cause a flare-up and make symptoms worse, potentially sidelining someone from further activity for prolonged periods.

Gentle stretching and range-of-motion exercises should be performed regularly (two to three times a day). Hamstring stretches, calf stretches, shoulder rolls and arm circles are a good start. Many people find that stretching just after a warm shower in the morning can help because the water relaxes muscles and joints. Stretching just before bedtime to help muscles and joints relax is another favorite time of day.

With regards to strengthening

and conditioning exercises, the key is to keep them low-impact and to avoid long workout sessions. Instead, perform several shorter bouts of exercise throughout the day. Overloading the joint and its surrounding tissues is a quick way to cause a flare-up. Heavy weights, jogging and stair climbing likely are not the best activities for someone with joint pain. Instead, consider walking, stationary biking, water aerobics, yoga, tai chi or other low-impact exercises that combine strengthening and aerobic exercise three to five days a week. If weight training is incorporated into a routine, it should not be performed more than two to three times a week. Choosing a resistance that can comfortably be lifted eight to 12 times may be less risky than focusing on muscle hypertrophy with high resistance and lower repetitions.

Skilled Therapy

Skilled physical therapy (PT) and/or occupational therapy (OT) may provide several benefits to someone experiencing joint pain. In addition to helping design a proper exercise program, therapists can teach proper body posture and mechanics to alleviate pain and help prevent flare-ups. In some cases, therapists may feel it is appropriate to provide braces or splints to support the joints and/or shoe inserts to reduce stress on the lower extremities. They can also help acquire and train individuals in the use of assistive devices such as walkers or canes, even if the equipment is just needed temporarily during a flare-up. PT, OT and/or massage therapists may also perform therapeutic massage to help relax muscles and improve blood circulation to painful areas.

Some of the tools that may be utilized by therapists can also be obtained independently, including thermal modalities (e.g., moist heat and ice) and transcutaneous electrical nerve stimulation (TENS). Thermal modalities may offer relief, particularly before or after exercise, although it is usually best to start with heat to warm up muscles and joint structures and end with ice to help decrease inflammation. Those with inflammatory arthritis may be sensitive to extreme temperatures, which can actually make matters worse, so precautions should be taken (for example, placing a towel between the heat or cold source and the skin). TENS uses small pulses of electricity to block pain signals through electrodes that are placed on the skin near the area of pain.

Alternative Treatments

Although scientific support is not yet readily available for alternative treatments, acupuncture, cannabidiol (CBD) products and over-the-counter (OTC) natural remedies have been proclaimed effective by many sufferers of joint pain.

Acupuncture is an ancient practice based on the belief that by inserting thin needles into specific points on the body, the normal flow of energy, called qi, can be restored, reducing pain in the process.

CBD is derived from the cannabis plant; however, because most products only contain trace amounts of tetrahydrocannabinol, products that include oils, tinctures, creams/gels and edibles will not produce the psychogenic effects or "high" of marijuana use.

Because of potential harmful interactions, physicians should be informed of any alternative treatments and OTC medications/remedies that a patient would like to try. Likewise, alternative treatment practitioners should be made aware of OTC and prescription medications that are part of the patient's regimen.

Outlook

The long-term effects of both inflammatory arthritis and OA depend on multiple factors. For example, some forms of arthritis, including RA, can lead to joint deformities that impair functional use of the hands and/or impact the sufferer's mobility. Any form of joint pain has the potential of interfering with someone's regular activities of daily living, including employment and socializing. Still, early intervention may help slow the course and avoid irreversible damage.

Because of the potentially highly debilitating nature of joint pain, it is essential to accurately identify its source and consistently apply an appropriate plan of care. Life can still remain productive and enjoyable, but it requires a thorough and coordinated response between the patient/client and a dedicated healthcare team.

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