Preventing and Treating Joint Deformities With Rheumatoid Arthritis

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Joint Deformities in Rheumatoid Arthritis

Rheumatoid arthritis not only causes pain on a daily basis to the patient, but unfortunately has the potential to cause deformities. Before more aggressive treatments were available, almost everyone with RA was confined to living with some degree of misshapen joints, but that is no longer the case.

Today, stronger medications make these deformities rarer, though that doesn't mean they are eradicated completely. There are some warning signs that you may develop complications with your joints, such as a very high rheumatoid factor (RF) or a high C-reactive protein (CRP), both of which can be found during normal blood tests.

Joint deformities in rheumatoid arthritis patients' joints differ from osteoarthritis patients' deformities in a few ways. For example, with osteoarthritis, which typically occurs when a patient is older, the damage is more attributed to general "wear and tear" of the joint. RA damage occurs because of the inflammation of the joints.

When the synovial membrane is swollen due to RA activity (the membrane around the joint), it leaves the joint vulnerable to all sorts of damage. The tendons may become damaged due to the swelling and the patient may experience cartilage loss. Additionally, the loss of bone mass and erosion may occur, leading to further damage.

Joint Deformities in Hands and Fingers

The biggest and most debilitating joint abnormalities are those of the hands, such as fingers. Those experiencing joint issues may have boutonniere finger (when the first joint of the finger extends backward unnaturally while the middle joint is turned inward) or finger swan neck (when the first joint of the finger extends forward unnaturally).

Patients may also experience dislocation of one or more fingers, all of their fingers drifting toward one direction (or in some cases, in all different directions) or partial dislocation of joints or the wrist. For some, their thumbs may take on the appearance of a Z, in what is known as Z-thumb.

All of these can be extremely painful and can render the joints unusable, resulting in further disability. However, doctors often work with patients once they have begun to develop these deformities in the hands particularly, as it is widely recognized that having issues with the hands more often affect daily life in a negative way.

Treatment for hand joint deformities in rheumatoid arthritis includes medication, ice and rest in the event of pain. Other treatment includes occupational therapy for keeping fingers limber, wrist splints, and silver rings, which may keep the joint stable and prevent it from continuing to grow in such a way that it is later rendered unusable.

In some cases, a joint replacement is recommended. This is not typically done on the middle or index fingers, as they are not as necessary for gripping objects (though it can be done on them as well). In most cases, the joint is fitted with a prosthesis made of either plastic, metal or silicone. The prosthesis can be cemented onto the bone, or

it can be placed a bit further out so that the bone will grow onto the prosthesis and place it there permanently.

It should be noted, however, that while a joint replacement may help significantly in RA cases, it doesn't mean it completely erases and fixes the problem. Pain and swelling may still occur around the joint.

If a patient is not a good candidate for joint replacement, joint fusion may also be an option to prevent further damage. This includes placing a metal rod on the joint to create one long bone (which, over time, will develop).

From that point on, the finger (or wrist, as sometimes is done for extremely painful and damaged wrists to improve grip and decrease pain) will be immobile, but it will be free of pain and further damage.

Joint Deformities in Feet and Toes

While the hands are the extremity that is affected the most when it comes to RA, the feet and toes can also be subject to abnormalities and debilitating deformities.

Just like in the hands, the toes may point in an unnatural direction (all together or all of them jutting out in different directions), extreme bunions, hammertoe (the toes curled downward), claw toes (in which the toes are bent in a claw position, and in some cases lose range of movement), and the arch collapsing due to weakened ligaments in the foot. Walking may become painful if the joints, especially in the ankle and foot, are left untreated.

Foot joint deformities in rheumatoid arthritis can be treated with orthotics, braces, rest, ice, special shoes and medication. In some cases, as such with the fingers, a joint replacement will be necessary in the toe or ankle joints. Joint fusion may also be an option for especially damaged joints.

For the wrists and ankles, the joints may also be "cleaned out" to drain any excess fluid, bone chips, repair ligaments, cartilage and tendons and see if there is any further damage. This minimally invasive surgery is known as arthroscopy, in which a small incision is made and a camera inserted into the joint. From there, the doctor can see exactly what needs to be "cleaned."

Rheumatoid Nodules

Additionally, many people suffer from what is known as a rheumatoid nodule, which is a swollen tissue lump. These may develop on bony parts of the body, but rarely also develop internally. They are benign and can be removed with surgery, but sometimes are just left there as they do not usually cause pain (though in some cases, they can).

The nodule has a center made of dead tissue, known as fibroid necrosis, with tissue surrounding it. A smaller nodule usually only has one center of dead tissue, while a bigger nodule may have several centers. Unfortunately, methotrexate, a drug which is sometimes used to treat RA, is known to make these nodules worse.

In order to ensure that your RA isn't causing damage, it is important for your doctor to routinely X-ray your hands and feet (and any other body part causing pain) to monitor any changes to the joint. If your doctor notices anything out of the ordinary, he or she may call for a CT scan to investigate further.

Early and swift intervention is key for preventing joint deformities in rheumatoid arthritis, further joint damage, and avoiding future surgeries.