Is There a Connection Between Rheumatic Fever and Rheumatoid Arthritis?

by EFFIE KOLIOPOULOS

Rheumatoid Arthritis vs Rheumatic Fever

Arthritis is an umbrella term for 100 different types of rheumatic disorders and related diseases. Out of those is an autoimmune disorder named rheumatoid arthritis. In wear-and-tear types of arthritis, such as osteoarthritis, a person may experience aches, pains, and localized tenderness. Inflammation may sometimes present itself too. With rheumatoid arthritis, however, the joints can become direct targets of irreversible damage from persistent, unchecked, and undertreated inflammatory markers that drive inflammation to begin with.

It can impact other organ systems besides the joints as well. Namely the eyes, skin, lungs, heart, and blood vessels. In the last several years, people have pushed for rheumatoid arthritis to be changed to rheumatoid disease. The premise behind this is that its effects are more widespread and long-lasting then people previously thought. With this change, people hope it can raise awareness on the importance to differentiate rheumatoid arthritis from other conditions. One of those conditions addressed in this article is, rheumatic fever. So, let's compare rheumatoid arthritis vs rheumatic fever.

Key Signs and Symptoms

First, in order to understand a bit about rheumatic fever, we must touch on the signs and symptoms of rheumatoid arthritis. People can exhibit all of these, or some or none at the beginning stages, which is why rheumatoid arthritis is so difficult to diagnose.

The factors to pay attention to if you suspect you or a loved one may be on the verge of this autoimmune disease are:

- Weight loss
- Weight gain
- Unrelenting fatigue even after getting the recommended hours of sleep
- Swollen joints that are warm and tender to touch, or at rest
- Joint stiffness and muscle pain that is worse upon waking, before bed, after a period of inactivity or after too much activity

These symptoms typically occur in the early stages of rheumatoid arthritis. Smaller joints in your hands and feet are where you may experience discomfort the most:

- Wrists
- Elbows
- Shoulders
- Hips
- Knees

- Ankles

The telltale signs of rheumatoid arthritis are that the same sides of the body are affected. This is called symmetry and can be detected by a physical examination by a rheumatologist.

Treatment Methods

There is no cure for rheumatoid arthritis yet, but medication and various lifestyle changes have given people a chance to live fully functional lives. Treatment methods will depend on the severity of a person's diagnosis and other personal factors discussed with their health providers.

Often times, patients find themselves needing to go through a trial-and-error process to find what works best. This can take weeks, months or years, as medications can stop working, thus needing to switch to another one. The good thing is that there are many treatment options to choose from, whether that is conventional or alternative.

Various research studies have found that remission can happen if early and aggressive treatment is administered. Remission is when symptoms improve and a person can ween off their medications, sometimes for good. These medications can range anywhere from nonsteroidal anti-inflammatory drugs (NSAIDs), steroids, disease-modifying antirheumatic drugs (DMARDs), and biologic agents.

Rheumatic Fever and Rheumatoid Arthritis: Is There a Connection?

The name rheumatic fever may seem as if it has a connection to rheumatoid arthritis, but it does not. While they are both inflammatory conditions, the cause and effect are quite different, though it must be noted that certain viruses and bacteria are known triggers in the development of rheumatoid arthritis. But with rheumatic fever the sole cause is untreated streptococcus bacteria. Group A streptococcus infections cause complications in the throat, leading to strep throat. When strep throat or scarlet fever linger without prompt treatment, it can lead to a cascade of signs and symptoms that mimic rheumatoid arthritis.

Rheumatic fever is known to affect children age 5 to 15 years old. Autoimmune arthritis can also affect kids in this age bracket. When that occurs it is called, juvenile idiopathic arthritis. It has been studied that a virus can trigger juvenile arthritis. Various rheumatic diseases are more common than people realize, but with rheumatic fever, it is actually a rare occurrence in many developing nations.

Similar to rheumatoid arthritis, rheumatic fever can cause damage to the organs. For rheumatic fever, the heart is the main target organ where people seem to have the most complications. Besides the heart, other areas that can be affected are the joints, skin, and central nervous system. Symptoms of rheumatic fever are: high fevers, tender and painful knees, ankles, elbows, wrists joints, fatigue, and chest pain. These are all present in rheumatoid arthritis patients.

However, there are some signs and symptoms present in rheumatic fever that are not usually seen with rheumatoid arthritis: painless rashes and bumps on the skin, uncontrollable body movements (Sydenham chorea), and unusual behavior. Lastly, strep bacteria have been found to contain a similar protein as in organ tissues. The immune system is responsible for killing off invaders, such as bacteria and viruses. With rheumatic fever, the immune system attacks its own organs, causing inflammation in the heart, joints, skin, and central nervous system.

How is Rheumatic Fever Treated?

Treatments for rheumatic fever can lessen pain, reduce the risk of damage from inflammation, and even be used as prevention to ward off a relapse. Penicillin or another antibiotic that is well tolerated, is proven to eliminate strep bacteria from the body. The child or teen will need to complete the full course of the antibiotic first and then follow-up with their doctor to make sure the strep is gone. Protocol states that doctors will have their patients begin another round of antibiotics for prevention, in the instance a rheumatic fever returns.

In order for rheumatic fever to be treated promptly, its crucial to see your doctor if you have symptoms of strep throat. These signs are what to look out for, especially in young children:

- Sore throat that occurs out of the blue
- Pain when swallowing
- Headaches
- Fever
- Stomach pain accompanied with nausea and vomiting

Takeaway

Rheumatoid arthritis and rheumatic fever may have similar medically classified names, but that is because these conditions can both affect the joints and organ systems. They are two different diseases that present with the same signs and symptoms, which is why it is important to see a doctor immediately to rule out the true cause of discomfort. Delaying treatment for both of these conditions can lead to serious long-term complications.

Modern medicine, however, has been able to stop further progression in both conditions. Viruses and bacteria can cause a plethora of ailments, ranging from mild to severe. Rheumatic fever is often severe right away, but rheumatoid arthritis can start out mild then gradually turn more severe. The main takeaway here is to treat both diseases as fast and aggressively as possible for the best outcome.