The Connection Between Rheumatoid Arthritis and Heart Disease

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Rheumatoid Arthritis and Heart Disease

Rheumatoid arthritis is a chronic inflammatory condition affecting multiple joints, especially those in the hands and feet. The disease can also affect the organs, such as the heart, lungs, skin, and eyes. People diagnosed with rheumatoid arthritis are twice as likely to develop heart disease. This article will look at the connection between RA and heart disease, symptoms to look out for, and treatment options.

What is the Connection Between Rheumatoid Arthritis and Heart Disease?

The main culprit that drives the prevalence of heart disease risk with RA is chronic inflammation. With awareness of the systemic nature of this disease, patients can better understand the risks. For instance, specific pro-inflammatory markers called cytokines can cause problems. If these inflammatory markers are not well controlled, they can damage the blood vessels and cause plaque build-up in the arteries. When this occurs, it raises blood pressure and reduces the blood flow to the heart.

Inflammation creates bad cholesterol (LDL) to chemically change the body's way of oxidation. When bad cholesterol is oxidized, it becomes easier to enter the lining of the coronary vessels. Thus, it can clog these areas of the heart and cause further inflammation. It’s important to note that this is more likely to happen in rheumatoid arthritis patients with higher disease activity. Although those with rheumatoid arthritis are more prone to heart disease because of the widespread inflammation occurring in the body, medications used to treat RA may lower heart disease risk.

Treatments such as tumor necrosis factor inhibitors (TNF), Humira, Enbrel, and Remicade, and disease-modifying antirheumatic drugs like methotrexate (DMARDs) have a positive effect on controlling inflammation throughout the body. Lifestyle changes are just as crucial in lowering someone’s risk for heart disease. Both patients and their doctors should pay close attention to cigarette smoking, obesity, high blood pressure, metabolic syndrome, and abnormal lipid levels. Sedentary behaviors, lower physical activity, and even diabetes coupled with rheumatoid arthritis magnify the risk even more.

On the contrary, a couple of medications used to treat rheumatoid arthritis, such as non-steroidal anti-inflammatory drugs (NSAIDs) and corticosteroids (prednisone), can have a negative effect when prescribed at higher doses for a prolonged period. While these medications can help with pain and inflammation, they can cause dysregulation within the body. Corticosteroids can increase blood pressure and sugar levels and raise LDL cholesterol and triglycerides. While touted as anti-inflammatories, NSAIDs can inhibit key enzymes, COX-1 and COX-2, that drive the risk for cardiovascular problems over time.

Gender plays a role in developing heart disease. Women are more likely to develop heart-related problems. For a rheumatoid arthritis diagnosis, the risk for women is higher partly to the differing sex hormones that make the female immune system stronger and more reactive. Despite this, both women and men with rheumatoid arthritis need to know what to watch out for when it comes to heart disease. Both genders are at risk due to the

inflammation occurring in the body from rheumatoid arthritis. The European League Against Rheumatism (EULAR) recommends heart test screenings at least once every five years. Then every time you change your RA medication.

Symptoms of Heart Disease with Rheumatoid Arthritis

When you live with rheumatoid arthritis, educating yourself about your risks and having an open dialogue with your rheumatologist or primary care doctor is key to knowing what to look out for. The telltale signs of heart disease are chest pain, shortness of breath, and arm pain. It may be hard to gauge what rheumatoid arthritis is versus a heart-related problem, but anything unusual that falls in line with heart disease risk needs to be reported to your doctor immediately for a prompt diagnosis and plan. The best form of treatment for heart disease is, first and foremost, prevention.

Treatment Options

The first steps include the following:

- Taking medication to treat rheumatoid arthritis
- Staying active
- Controlling stress
- Eating a well-balanced diet that is low-fat, low-salt, and rich in omega-3 fatty acids
- Other methods for pain relief
- Alternative topicals
- Physical therapy
- Heat or ice

Heart disease treatment depends on the type of heart damage as well. Standard blood tests and chest X-rays are used to diagnose any heart disease-related issues. Various other tests may be ordered by your medical provider, ranging from non-invasive electrocardiogram (ECG or EKG) to more invasive CT or MRI scans, stress tests, and cardiac catheterization, which shows blockages in the heart arteries.

If the lifestyle changes and medications used to treat rheumatoid arthritis and heart disease don’t work, then several surgery options are available. What would be best depends on your specific situation. Heart health evaluations and testing of blood pressure, blood sugar, and cholesterol, with routine bloodwork for rheumatoid arthritis, can help you and your medical provider monitor your risk for heart disease effectively and efficiently.