Corresponding Author*
Hiroshi Kawaguchi,
Head, Spine Center JCHO Tokyo Shinjuku Medical Center, Japan

Copyright: 2021 Hiroshi Kawaguchi. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Introduction
Inflammatory arthritis is the name used to describe a group of diseases caused by an overactive immune system that results in inflammation. Many forms of these diseases manifest mainly with inflammation of the joints felt as joint pain and stiffness, but inflammatory arthritis can also affect other connective tissues, including the lungs, heart, eyes, skin and other organs. Importantly, when inflammation affects any part of the body it can result in damage which is irreversible.

In usual situations, the body responds to infection or the presence of a foreign substance, such as bacteria, a virus or fungus, by producing special cells called lymphocytes that kill and clean up harmful “invaders.” Inflammation is normally a process that occurs when the body recruits those special cells and uses complex proteins (“cytokines and other chemical messengers”) to do this job. The term inflammation comes from the Latin word inflammare, which means “to set on fire.”

In a healthy person, inflammation is a limited and ultimately helpful response to fight off a foreign substance. Once the infection or virus has been eliminated, inflammation and the swelling, heat and tenderness that come with it resolves. (For example, consider a minor infection of a cut or scrape, which is tender, pink and swollen, then resumes its normal appearance and sensation as the body fights the infection.)

In a person with inflammatory arthritis, the immune response has “gone wrong” and lacks the ability to self-regulate or stop, and the immune system turns on one’s self. This is the meaning of “autoimmunity”. Different kinds of inflammatory arthritis reflect a set of “auto-immune” diseases where the body cannot distinguish between its own healthy cells and tissues (i.e. itself) and a foreign substance.

One of the most common types of inflammatory arthritis is rheumatoid arthritis (also referred to as RA), affecting between 1 and 2 million Americans. It occurs most often in the hands, wrists and feet. Rheumatoid arthritis (RA) is a chronic inflammatory disease that affects the synovial lining between the joints and can lead to severe pain and loss of function.

Since inflammatory arthritis is a chronic disease, it affects people of all ages, often striking people in their peak working and child-rearing age. IA diseases can often be diagnosed in patients as young as age 20 or 30. Less commonly, kids and teens may be diagnosed with a form of childhood arthritis, such as juvenile idiopathic arthritis. IA is more common in females than in males, and it is not understood why.