How Trauma Increases Autoimmune Disease Risk

By Lynn C. Allison

Autoimmune diseases are on the rise, increasing as much as 12 percent annually. There are approximately 80 types of autoimmune diseases affecting more than 50 million people in the U.S. This makes autoimmunity the third most prevalent disease category, surpassed only by cancer and heart disease, according to the National Institute of Environmental Health Sciences.

Common autoimmune disorders include lupus, rheumatoid arthritis, multiple sclerosis, celiac disease, and Type 1 diabetes. Jacob Teitelbaum, M.D., a board-certified internist and author of "From Fatigued to Fantastic!" says more than one-third of the population are showing blood test changes that may predispose them to developing an autoimmune disease. "Understanding the causes and triggers is essential," Teitelbaum tells *Health Radar*.

Autoimmune diseases develop when the body's immune system attacks healthy cells, tissues, and organs instead of protecting them against infection. While a person's genes and environmental exposures play a significant role in autoimmunity, experts say that trauma, both emotional and physical, is another important cause.

The Effect of Trauma on Autoimmune Disease Risk

The Adverse Childhood Experiences (ACEs) study, which included 15,357 participants and was published in the journal *Psychosomatic Medicine*, examined whether childhood traumatic stress increased the risk of developing autoimmune diseases as an adult. The researchers found that people who had the most adverse events, including childhood physical, emotional, or sexual abuse along with witnessing domestic violence, mental illness in the home, or parental divorce had the most hospitalizations due to autoimmune diseases. More than 64 percent of those hospitalized reported at least one ACE, and people with two ACEs or more had an increased risk of hospitalization of more than 70 percent.

Teitelbaum says that physical injury has also been shown to increase the risk of autoimmune disease. For example, the risk of rheumatoid arthritis increases in the year following a fracture or other injury to the bones.

There are several reasons why emotional and physical trauma can raise autoimmune risk. Neuroscientist Marc Hauser, Ph.D., author of "Vulnerable Minds: The Harm of Childhood Trauma and the Hope of Resilience," explains that our responses to adverse experiences can either be traumatic or resilient. "Trauma is a response to an adverse experience that shows up as damage to the body and brain," he says. This triggers a cascade of physiological changes, including increased heart rate, blood pressure, and cortisol, which can magnify gastrointestinal problems and ramp up inflammation. Children with traumatic experiences have more inflammation in adulthood, highlighting the link between early life stress and the immune system.

Calming the Immune System

Fortunately, the psyche's effect on autoimmune response is a two-way street. "Even after long emotional or physical trauma, creating a feeling of safety can help settle an overactivated immune system," says Teitelbaum. "Applying simple methods makes the immune system more effective in going after infections instead of its own body."

Lifestyle changes include managing stress through meditation or prayer. These practices can help the immune system sound the "all clear" signal and get back to fighting off infections instead of normal cells. Avoiding inflammatory foods such as sugar and white flour and taking a multivitamin that includes zinc can also bolster an appropriate immune response. Exercise also helps.

Hauser says that trauma impacts sleep, and sleep deprivation undermines the autoimmune system. "Meditative practices, darkening the room, taking melatonin, and unplugging from the internet before going to sleep are ways to ensure quality sleep," he explains. Relaxing breathing methods before bedtime can also help. Controlled breathing patterns work directly with the parasympathetic nervous system to bring greater calm. □