

Immunogenetics: Open Access

Commentary

Auto Immune System Protection Against Environmental Factors

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DESCRIPTION

The natural defense system cannot distinguish between cells and alien cells; an autoimmune disease develops and unintentionally attacks healthy cells. Autoimmune disease come in more than 80 different varieties and affects many different body parts. A person's autoimmune disease symptoms may occur secondary to severe. There are various levels of autoimmune illness. A person's symptoms are probably related to a number of variables, such as heredity, environment, and personal health.

An autoimmune disease is a disorder where the body is attacked by the immune system. Normally, the immune system protects against viruses and germs. It sends out an army of fighter cells to attack these foreign invaders as soon as it detects them. Immune systems can typically distinguish between their own cells and foreign cells. An autoimmune disease occurs when the immune system misidentifies a biological part, such as the joints or skin, as alien. It releases proteins called autoantibodies that attack healthy cells. Some autoimmune disorders only affect a single organ. The pancreas is harmed by type 1 diabetes. Other illnesses, such as lupus or Systemic Lupus Erythematous (SLE), can have a total body impact.

Specific ethnic groups are more likely to develop certain autoimmune illnesses. For instance, white people are less affected by lupus than are African Americans and Hispanics. Lupus and multiple sclerosis are two autoimmune diseases that run in families. They all have susceptibility for autoimmune disorders, even if not every family member will necessarily have the same disease. Environmental factors including infections and exposure to chemicals or solvents, could potentially contribute to the growth in the prevalence of autoimmune diseases. A "Western diet" is another factor that could increase your risk of acquiring an autoimmune illness. Inflammation is likely to be exacerbated by eating foods high in fat, sugar, and processed.

Immune system disorders cause in abnormally low or high immune system activity. Overactive immune systems cause the body to attack and harm its own tissues (autoimmune diseases).

Immune deficiency illnesses make the body less able to defend itself against invaders, making it more susceptible to infections. The immune system may start manufacturing antibodies in response to an unidentified trigger that, instead of battling infections, target the body's own tissues. The goal of autoimmune illness treatment is often to lower immune system activity. Autoimmune disorders examples include:

Arthritis rheumatic

Antibodies made by the immune system adhere to joint linings. The joints are then attacked by immune system cells, which result in discomfort, swelling, and inflammation. Rheumatoid arthritis eventually damages joints permanently if left untreated. There are many oral or injectable drugs that can be used to treat rheumatoid arthritis and lower immune system over activity. Check out the charts that list the side effects of rheumatoid arthritis medications.

Lupus erythematous systemic

Those who have lupus produce autoimmune antibodies that can cling to body tissues all over. Commonly impacted by lupus include the joints, lungs, blood cells, nerves, and kidneys. Prednisone, an oral steroid that lowers immune system activity, is frequently prescribed as part of treatment

Inflammatory Bowel Disease (IBD)

The immune system destroys the lining of the intestines, leading to episodes of diarrhea, rectal bleeding, urgent bowel movements, stomach pain, fever, and weight loss. The two main types of IBD are ulcerative colitis and Crohn's disease. Immune-suppressing drugs can be used to treat IBD orally or intravenously. Crohn's disease and ulcerative colitis differ from one another.

Multiple Sclerosis (MS)

It is a condition in which the immune system destroys nerve cells, leading to symptoms such as pain, blindness, weakness, sluggishness, and muscular spasms. Multiple sclerosis can be treated with a variety of immunosuppressant medications.

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