

## Immune System Disorder Cause And Their Antibody Reaction

Received : July 09, 2020; Accepted : July 23, 2020; Published : July 30, 2020

### Introduction

When the immune system erroneously targets and kills healthy bodily tissue, it causes an autoimmune disease. Autoimmune diseases come in a wide variety of forms.

### Causes

Immune system blood cells guard the body against invasion. There are several examples of pathogens outside of the body, such as bacteria, viruses, poisons, and cancer cells. Antigens can be found in all of these things. In order to get rid of these dangerous chemicals, the immune system makes antibodies against certain antigens.

When you have an autoimmune disease, your immune system does not know the difference between healthy tissue and potentially dangerous antigens. As a result, the body triggers a response that has unfortunate consequences.

An autoimmune disease may cause one or more of the following symptoms

One or more organs or tissues types may be affected by an autoimmune disease. Autoimmune diseases commonly affect the blood vessels, connective tissues, endocrine glands, joints, muscles, red blood cells, and skin.

### Antibody Reaction On Immune System

The Autoantibodies are antibodies (immune proteins) that erroneously target and react with a person's own tissues or organs. When the immune system is unable to tell the difference between "self" and "non-self," it may create one or more autoantibodies.

Most of the time, the immune system is able to tell the difference between foreign substances (referred to as "non-self") and the body's own cells. The immune system only creates antibodies in response to a perceived danger ("non-self"), such as exposure to germs or viruses. Autoantibodies, which react with the body's own cells, tissues, and/or organs, can develop when the immune system fails to recognise one or more of the body's typical elements as "self."

Autoantibody tests, x-rays, and other imaging studies, as well as biopsies, are used to assist identify an autoimmune disease. They can be used to measure the severity of an illness, track the progression of a disease, and gauge the success of treatment options in some circumstances.

It's possible that an autoantibody test will be performed when

Claudia Bolognesi\*

Department of Pneumologia,  
Normandie University, Genoa, Italy

### Corresponding author:

Claudia B, Department of  
Pneumologia, Normandie  
University, Genoa, Italy

 claudiabolognesi@yahoo.it

**Citation:** Petryk N(2021) Long term inflammation in rat due to mesenchymal cell, Autoimmune Disord .Vol.7 No.1:5

someone has persistent, progressing arthritic symptoms as well as a fever, tiredness, muscular weakness, and/or a rash that can't be explained.

Antinuclear antibody (ANA) testing is a frequently requested procedure. Lupus, Sjögren syndrome, rheumatoid arthritis, and autoimmune hepatitis are just a few of the autoimmune disorders for which ANA testing may be positive.

The utilisation of test techniques that recognise conformation-dependent epitopes is required for their identification. Cell-based assays and tissue-based assays using unfixed rat brain tissue are notable examples of this. Most of the known neuronal surface antibodies can be detected using tissue-based assays, making it possible to screen a wide variety of biological materials. Complementary testing on living neural cell cultures may validate that the antibody identifies an epitope on the surface. Patients with peripheral neuropathy may have their testing expanded to include teased nerve fibres to look for antibodies to the Ranvier node.

Patients with surface autoimmunity exhibit considerable responsiveness to immunotherapy, in contrast to autoimmune reactions against intracellular antigens, which are commonly linked with malignant or idiopathic neurological disorders and poor neurological prognosis (1). One of the hallmarks of paraneoplastic neurological syndromes (PNS) is T-cell-mediated immune assault, which results in increasing cell death and may explain immunotherapy's poor effectiveness (2). Anti-amphiphysin antibodies (3) have been shown to have a harmful effect, but mechanisms and roles of other autoantibodies that develop in the setting of typical paraneoplastic diseases (so-called onconeural antibodies) are still unknown