Patients with schizophrenia and their parents have a higher risk of certain autoimmune diseases, particularly thyroid disorders and celiac disease.

The Connection

In an article published in the March 2006 issue of the American Journal of Psychiatry, Dr. William Eaton and his colleagues at Johns Hopkins University in Baltimore Maryland examined the association between schizophrenia and autoimmune diseases. In the study, researchers examined the records of 7704 people older than 15 years diagnosed with schizophrenia between 1981 and 1998 and also their parents, along with a random sampling of people in the general population and their parents who served as controls.

An Autoimmune Disease History

From the data studied researchers found that people with a history of one or more autoimmune diseases had a 45 percent higher risk of schizophrenia. In addition, patients with schizophrenia had a higher prevalence of nine specific autoimmune disorders, including celiac disease, autoimmune thyroid disorders, acquired hemolytic anemia, Sjogren’s syndrome, chronic active hepatitis, alopecia areata, interstitial cystitis (bladder condition characterized by urinary frequency and pelvic pain), polymyalgia rheumatica, myositis, and type 1 diabetes, compared to control subjects.

The parents of the schizophrenic patients had a higher prevalence of 12 specific autoimmune disorders including Graves’ disease, thyroiditis, celiac disease, psoriasis, intestinal malabsorption, acquired hemolytic anemia, interstitial cystitis, celiac disease, and Sjogren’s syndrome. Overall, patients and their relatives had either higher or lower than expected prevalences of certain autoimmune disorders. For instance, although patients with schizophrenia had a higher incidence of the autoimmune disorders listed here, they had a much lower incidence of certain autoimmune disorders, particularly rheumatoid arthritis.

Top Five Autoimmune Disorders Associated with Schizophrenia

Five autoimmune disorders appeared more frequently in patients with schizophrenia and also their parents prior to their onset of schizophrenia. These disorders included:

* Graves’ disease
* Intestinal malabsorption
* Acquired hemolytic anemia
* Interstitial cystitis
* Sjogren’s syndrome
Reasons for The Association

Theories on the autoimmune aspects of schizophrenia are focused around the notion of early infection with microorganisms that mimic the tissue antigens of the central nervous system, causing the production of antibodies (autoantibodies) against these components. Studies have also shown evidence of a genetic locus for schizophrenia in the area of the human leukocyte antigens (HLA) suggesting that schizophrenia could have an autoimmune origin. Another theory states that treatments used for autoimmune disorders could possibly trigger the onset of schizophrenia.

The Celiac Disease Connection

An association between celiac disease and schizophrenia was first reported in 1961. The psychiatric and neurological symptoms that are sometimes seen in celiac disease may result from nutrient deficiencies. However, researchers suspect that gluten protein (found in wheat, rye, and barley) may precipitate schizophrenia in some individuals. A strong link between gluten sensitivity enteropathy or celiac disease and autism has also been previously established.

Resources:


The copyright of the article Schizophrenia and Autoimmunity in Autoimmune Disease is owned by Elaine Moore. Permission to republish Schizophrenia and Autoimmunity in print or online must be granted by the author in writing.