

What is Immune-Mediated Ataxia?

Immune-Mediated Ataxias are a group of neurological disorders caused when someone's immune system mistakenly attacks healthy cells in the cerebellum (the coordination center of the brain) and related brain regions. Many underlying triggers can cause this mistaken immune response, such as an infection, gluten reactivity, surgery, or hidden cancer.

What are the symptoms of Immune-Mediated Ataxia?

Much like other kinds of Ataxia, the first symptoms of Immune-Mediated Ataxias are often decreased coordination, abnormal walking, and trouble balancing. People with Immune-Mediated Ataxia may begin walking with a wider stance to try to feel more stable. Having swallowing or slurred speech is also common. Unlike in genetic Ataxias, where it can take years for symptoms to develop, Immune-Mediated Ataxia symptoms progress quite quickly – on a scale of days, weeks, or months.

Depending on the underlying immune response causing the Ataxia, patients may have other symptoms such as seizures, spasms, diarrhea, or sudden weight loss.

What is the prognosis for Immune-Mediated Ataxia?

The symptoms of Immune-Mediated Ataxias can occur at any age. There are more treatment options for Immune-Mediated Ataxias than for other Ataxia types.

If the underlying immune response causing the Ataxia is treated and stopped, the Ataxia symptoms may also stop. With medication and physical therapy, some patients can regain their sense of balance. If there has been a large amount of damage to the neurons in the cerebellum, some patients continue to have balance and coordination difficulties after treatment. However, once the immune response is stopped, symptoms do not progress or get worse.

The type of treatment varies depending on the kinds of Immune-Mediated Ataxia someone has, all with the goal of stopping the immune response.

For example, someone with gluten Ataxia is treated through a strict gluten-free diet. Someone whose Ataxia is caused by a cancerous tumor will have the tumor removed through surgery, shrunk with radiation, or treated with chemotherapy. Plasmapheresis can be done with machines to remove Ataxia-causing antibodies from people's blood. There are also treatments that tone down immune responses the body is making by reducing the number of immune cells. Some less-understood Immune-Mediated Ataxia types, such as anti-GAD Ataxia, do not have specific treatment options.

There are also medication options to help manage Ataxia symptoms. Symptomatic treatments can be used in combination with treatments that stop immune responses. They can also be used on their own if the underlying immune response has not been identified yet.

How is the diagnosis made?

A neurological examination is used to determine if someone has Ataxia symptoms. Then an Immune-Mediated Ataxia diagnosis is usually made through exclusion. This means that other known causes of Ataxia, like genetic Ataxias, are ruled out until the only remaining causes are related to the immune system.

Doctors will often conduct antibody panel tests, which look for specific types of antibodies that are known to cause Ataxia in your blood or cerebrospinal fluid. Other tests can include brain imaging or body scans to figure out where immune responses are happening in the body.

People with Immune-Mediated Ataxia do not typically have a family history of Ataxia. However, they may have a family history of other autoimmune diseases (such as type one diabetes, pernicious anemia, thyroid autoimmunity, or vitiligo). This can be an important clue to the diagnosis.

What kind of support is available after the diagnosis?

The National Ataxia Foundation (NAF) is committed to providing information and education about Ataxia, support groups for those affected by Ataxia, and promoting and funding research to find the cause for the various forms of Ataxia, better treatments, and, hopefully someday, a cure. NAF has been at the forefront funding promising worldwide research to find answers.

As Ataxia research moves into the clinical phase, pharmaceutical companies will begin recruiting participants for clinical trials. Individuals with Ataxia or who are at-risk for Ataxia are encouraged to enroll in the CoRDS Ataxia Patient Registry. To access the Registry, go to NAF's website www.ataxia.org and click on the "Enroll in the Patient Registry" tab and follow the directions on the CoRDS website.

NAF provides accurate information for you, your family, and your physician about Ataxia. Please visit the NAF website at www.ataxia.org for additional information, including a listing of ataxia support groups, physicians who treat Ataxia, social networks, and more. For questions contact the NAF directly at (763) 553-0020 or naf@ataxia.org.