

What is Paraneoplastic Cerebellar Degeneration?

Paraneoplastic syndromes are disorders that occur when someone has cancer. The symptoms experienced are not caused directly by the cancer itself. Instead, they occur when someone's immune system releases antibodies to destroy the tumor. While trying to get rid of the cancer, the antibodies accidentally damage healthy cells, too. This is what causes paraneoplastic symptoms.

Often, paraneoplastic symptoms can be the first sign that someone has cancer. Depending on what type of health cells are damaged, symptoms will differ. The most common paraneoplastic syndromes involve your nervous system, endocrine system (hormones), bones, joints, blood, and skin.

If someone's cerebellum is damaged due to paraneoplastic antibodies, they can develop Paraneoplastic Cerebellar Degeneration. This is a type of acquired ataxia, meaning that the ataxia symptoms are the result of an injury or illness. Paraneoplastic Cerebellar Degeneration is very rare. Less than 1% of cancer patients will develop Paraneoplastic Cerebellar Degeneration.

What are the symptoms of Paraneoplastic Cerebellar Degeneration?

Paraneoplastic Cerebellar Degeneration usually begins with mild symptoms, with some problems with balance, coordination, double vision, and fine motor skills. Over the course of weeks or months, these symptoms get worse over time. In rare cases, there can be a rapid progression of symptoms over the course of a few days. Sometimes, people with Paraneoplastic Cerebellar Degeneration will experience nausea, vomiting, dizziness, and other flu-like symptoms before their balance and coordination worsen.

Less common symptoms include repetitive and uncontrolled eye movements, tremors, difficulty speaking, or difficulty swallowing.

What is the prognosis for Paraneoplastic Cerebellar Degeneration?

Early diagnosis is critical for Paraneoplastic Cerebellar Degeneration. Once someone is diagnosed, they can begin treatment for the underlying cancer causing their symptoms. This can also include immunotherapy to minimize antibody damage to their cerebellum. The goal is to stop the progression of damage to the cerebellum as quickly as possible, while recovery is still possible. After a certain point, the antibodies will have done significant damage to the brain. Treatment after this amount of damage will prevent ataxia symptoms from worsening, but may not show much improvement.

Thus, the prognosis for people with Paraneoplastic Cerebellar Degeneration varies depending on how quickly they receive treatment. Some potential outcomes include full recovery, partial recovery, stabilization of ataxia symptoms, progressive ataxia symptoms, or inconsistent/relapsing ataxia symptoms. However, for most people, with proper support and treatment, some improvement is possible.

There are also rehabilitation strategies to help treat ataxia symptoms, including exercise, physical therapy, occupational therapy, and speech therapy. Medications may also help treat motor symptoms. This kind of rehabilitation treatment is completed after the underlying cancer has already been treated.

How is Paraneoplastic Cerebellar Degeneration diagnosed?

A neurologist is often the most helpful specialist in recognizing symptoms and diagnosing the disease that causes Ataxia. A neurologic examination can determine whether a person has ataxia symptoms. MRI brain imaging, CT imaging, lumbar punctures, and paraneoplastic antibody assays may be used to confirm the diagnosis of Paraneoplastic Cerebellar Degeneration. Sharing personal or family history of cancer or autoimmune disease is also important for a diagnosis.

What kind of support is available after the diagnosis?

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.

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.