

Guillain-Barre Syndrome: Review and Summary

M Shannon Byers*

Department of Life and Physical Sciences, Tennessee State University, Nashville, TN 37209, USA.

Published March 07, 2024

ABSTRACT

Guillain-Barré Syndrome is a life-threatening and demyelinating autoimmune condition. In Guillain-Barré Syndrome, the body's immune system attacks the myelin of the peripheral nervous system. Guillain-Barré Syndrome is characterized by ascending motor weakness and acute flaccid paralysis. Demyelination results in nerve inflammation, numbness, tingling, muscle weakness, structural damage to the myelin sheath, and possible respiratory system complications. The annual incidence rate is 1.1 to 1.8 per 100,000 persons worldwide. Guillain-Barré Syndrome is thought to be triggered by an antecedent infection such as a viral, gastrointestinal, or bacterial infection, food poisoning, or the body's reaction to a vaccine. Approximately 9-11% of cases result in severe disability or death. The acute phase can vary in length from a few days to several months, although over 90% of patients begin rehabilitation within four weeks. Patient care involves a team of neurologists, physiatrist, internist, nurses, physical, occupational, and speech therapists, social worker, psychologist, and family physician. Elevated cerebrospinal fluid protein, symmetrical muscle weakness, the rate and order at which symptoms appear, and the absence or prolonged latency of reflexes are hallmarks for diagnosing Guillain-Barré Syndrome. A lumbar puncture to test for protein levels in the brain and spinal cord, and a nerve conduction velocity test may aid in proper diagnosis, which is critical for optimizing treatment options and minimizing further progression. Although there is no cure, treatment may consist of plasmapheresis, typically performed four times during hospitalization, or intravenous immunoglobulin. Intravenous immunoglobulin should not be combined with plasmapheresis. Although glucocorticoids could repair damage to the blood-nerve barrier, oral corticosteroid treatment could delay recovery in Guillain-Barré Syndrome. Although several studies have elucidated underlying genetic and immunological factors in the development of Guillain-Barré Syndrome, more research is still needed in this area.

Keywords: Guillain-Barré syndrome, Demyelination results, Patient care

Corresponding author: M Shannon Byers, Department of Life and Physical Sciences, Tennessee State University, Nashville, TN 37209, USA, E-mail: maryshannonbyers@yahoo.com

Citation: Byers MS. (2024) Guillain-Barre Syndrome: Review and Summary. J Psychiatry Psychol Res, 7(S1): 02.

Copyright: ©2024 Byers MS. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.