COVID-19 is an emerging, rapidly evolving situation.

Get the latest public health information from CDC: **https://www.coronavirus.gov**

Get the latest research information from NIH: **https://www.nih.gov/coronavirus**

NIH staff guidance on coronavirus (NIH Only)

Hereditary Spastic Paraplegia Information Page

Definition

Hereditary spastic paraplegia (HSP), also called familial spastic paraparesis (FSP), refers to a group of inherited disorders that are characterized by progressive weakness and spasticity (stiffness) of the legs. Early in the disease course, there may be mild gait difficulties and stiffness. These symptoms typically slowly progress so that eventually individuals with HSP may require the assistance of a cane, walker, or wheelchair. Though the primary features of "pure" HSP are progressive lower limb spasticity and weakness, complicated forms may be accompanied by other symptoms. These additional symptoms include impaired vision due to cataracts and problems with the optic nerve and retina of the eye, ataxia (lack of muscle coordination), epilepsy, cognitive impairment, peripheral neuropathy, and deafness. The diagnosis of HSP is primarily by neurological examination and testing to rule out other disorders. Brain MRI abnormalities, such as a thin corpus callosum, may be seen in some of the complicated forms of HSP. Several genetic mutations have been identified which underlie various forms of HSP, and specialized genetic testing and diagnosis are available at some medical centers. HSP has several forms of inheritance. Not all children in a family will necessarily develop symptoms, although they may be carriers of the abnormal gene. Symptoms may begin in childhood or adulthood, depending on the particular HSP gene involved.

Treatment

There are no specific treatments to prevent, slow, or reverse HSP. Symptomatic treatments used for spasticity, such as muscle relaxants, are sometimes helpful. Regular physical therapy is important for muscle strength and to preserve range of motion.

Prognosis

The prognosis for individuals with HSP varies Some individuals are very disabled and others have only mild disability. The majority of individuals with uncomplicated HSP have a normal life expectancy.

What research is being done?

The NINDS supports research on genetic disorders such as HSP. More than 30 genes that are responsible for several forms of HSP have been identified, and many more will likely be identified in the future. These genes generally encode proteins that normally help maintain the function of axons in the spinal cord.

Understanding how mutations of these genes cause HSP should lead to ways to prevent, treat, and cure HSP.

Information from the National Library of Medicine's MedlinePlus
Leg Injuries and Disorders

Clinical Trials

- **Throughout the U.S. and Worldwide**
- **NINDS Clinical Trials**

Patient Organizations

Genetic Alliance
4301 Connecticut Avenue, N.W.
Suite 404
Washington
DC
Washington, DC 20008-2369
info@geneticalliance.org
http://www.geneticalliance.org
Tel: 202-966-5557; 800-336-GENE (4363)

National Organization for Rare Disorders (NORD)
55 Kenosia Avenue
Danbury
CT
Danbury, CT 06810
orphan@rarediseases.org
http://rarediseases.org
Tel: 203-744-0100; Voice Mail: 800-999-NORD (6673)

Spastic Paraplegia Foundation
1605 Goularte Place
Fremont
CA
Fremont, CA 94539-7241
information@sp-foundation.org
https://sp-foundation.org/
Tel: 877-773-4483

See all related organizations

Publications

Order NINDS Publications

Patient Organizations

Genetic Alliance
4301 Connecticut Avenue, N.W.
Suite 404
Washington
DC
Washington, DC 20008-2369
info@geneticalliance.org
http://www.geneticalliance.org
Tel: 202-966-5557; 800-336-GENE (4363)

National Organization for Rare Disorders (NORD)
55 Kenosia Avenue
Danbury
CT
Danbury, CT 06810
orphan@rarediseases.org
http://rarediseases.org
Tel: 203-744-0100; Voice Mail: 800-999-NORD (6673)

Spastic Paraplegia Foundation
1605 Goularte Place
Fremont
CA
Fremont, CA 94539-7241
information@sp-foundation.org
https://sp-foundation.org/
Tel: 877-773-4483

See all related organizations

Was this page helpful?

○Yes

○No

Next

Form Approved OMB# 0925-0648 Exp. Date 05/31/2021

Date last modified: Wed, 2019-03-27 16:20

FOLLOW

Facebook
Twitter
YouTube
Blog
RSS Feed