

# Primary Lateral Sclerosis

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A Patient's Guide Through the Medical Maze



Research / Education / Support

HEREDITARY SPASTIC PARAPLEGIA  
PRIMARY LATERAL SCLEROSIS

[www.sp-foundation.org](http://www.sp-foundation.org)

### *What are the symptoms of PLS?*

The first symptoms are often **tripping** or **difficulty lifting the legs**. Other people may be the first to notice a change in the affected person's gait. Occasionally, **speaking** (dysarthria) and **swallowing** (dysphagia) difficulties, or **arm weakness** are the first symptoms. Speech problems can begin with hoarseness, a reduced rate of speaking, excessive clearing of the throat, or slurred speech when a person is tired. In some cases, speech becomes so slurred that others cannot understand it.  **Drooling** can be a problem as well due to weakened bulbar muscles.

Other common symptoms are **hyperactive reflexes**.

### *Does stress affect my symptoms?*

Many people find the tightness in their muscles worsens when they are angry, stressed, or upset. This may make it more difficult to walk/or speak. It is unknown exactly how emotions affect muscle tone, but it may involve adrenalin level. Most people also report increased stiffness in cold weather.

### *WHAT IS PLS?*

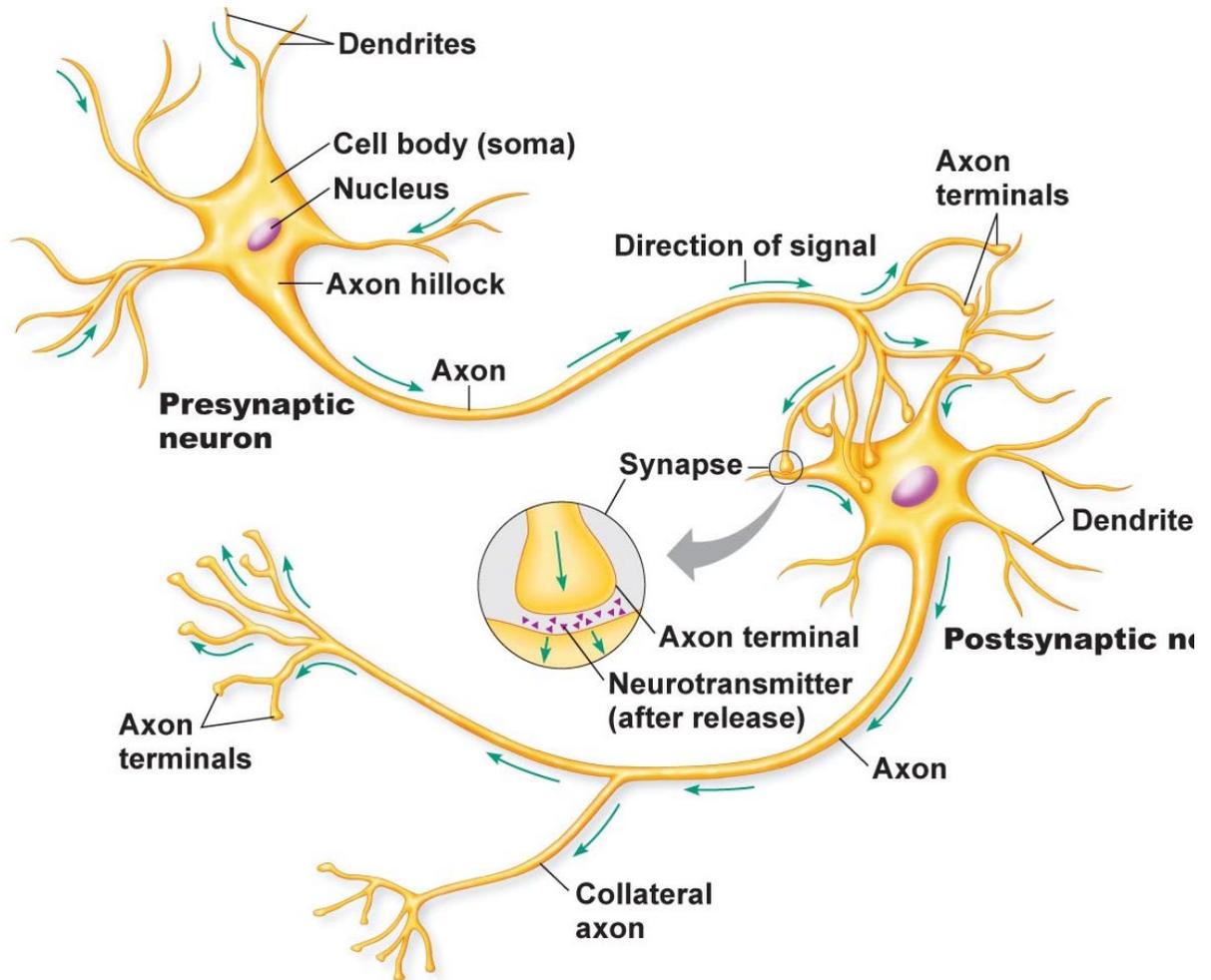
PRIMARY LATERAL SCLEROSIS (PLS) is a group of rare, degenerative, neurological disorders. They are sporadic, meaning there is no clear familial link, although there are hereditary forms of PLS.

PLS is caused primarily by degeneration of the upper motor neurons in the brain and spinal cord, which results in increasing spasticity and weakness of voluntary muscles. It is often referred to as a benign variant of Amyotrophic Lateral Sclerosis (ALS, Lou Gehrig's disease).

### *What should I expect?*

Wherever symptoms originate, the legs, arms, hands, and speech and swallowing muscles will all eventually be affected. In time, assistive devices are needed, such as canes, walkers, or wheelchairs. Speech therapy and communication aids may become necessary as well.

# BASIC CELL BIOLOGY



## BASIC CELL BIOLOGY EXPLAINED

I'm sure you've gone to the doctor's office and left there just as confused as you went in—maybe more!

PLS is caused by degeneration of the upper motor neurons in the brain and spinal cord. Even though the trouble may be with your legs, upper motor neurons control voluntary movement.

The cell bodies of these neurons are located in the motor cortex area of the brain. They have long, hair-like processes called axons that travel to the brainstem and down the spinal cord.

## What can I do now?

**“There’s no cure or magic pill, there are only treatments.”**  
**-Dr. John K. Fink**



### **Drug Therapy**

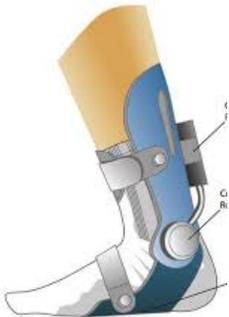
Baclofen, Xanaflex,  
Gabapentin, Tizanidine  
Dantrolene Sodium  
Diazepam, Clonazepam, etc.



### **Exercise**

Pilates, Yoga, Physical Therapy,  
Aquatic Aerobics

Ankle-Orthosis



### **Assistive devices**

AFOs (ankle/foot orthotic)  
Canes ( or forearm crutches)  
Walker (walking frame)  
Rollator  
Scooter  
Wheelchair (manual or electric)  
Speaking devices



### **Stretching**

calves  
quadriceps  
hip flexors  
psoas muscle



## Nutrition

Vegetarian  
Vegan  
Gluten-Free  
Paleo  
Mediterranean



## Supplements

CoQ 10, Vitamine E, Magnesium,  
Vitamine D3, Vitamine B12,  
Fish Oil,  
Quinine, Green Tea, Bacopa,  
Ashwagandha, Oregano Oil,  
Alpha-Lipoic Acid, etc.

# Alternative Medicine



Healthy.  
Happy.  
Holistic.

- Massage Therapy
- Chiropractic Treatments
- Acupuncture
- Magnet Therapy
- Meditation
- Biofeedback
- Hyperbaric Treatment
- Alexander Technique, etc.

## Where do I go for help?

NORD (National Organization for Rare Disorders) [www.rarediseases.org](http://www.rarediseases.org)  
NEALS (Northeast Amyotrophic Lateral Sclerosis) [www.alsconsortium.org](http://www.alsconsortium.org)  
SPF (Spastic Paraplegia Foundation) [www.sp-foundation.org](http://www.sp-foundation.org)  
NIH (National Institutes of Health) [www.nih.gov](http://www.nih.gov)  
Social Media – SPF Face Book page  
Etc.

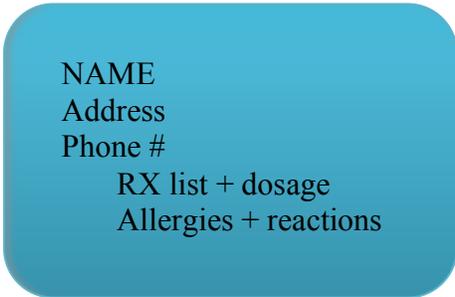
## Where can I go for research?

[www.clinicaltrial.gov](http://www.clinicaltrial.gov)

## Where can I find a doctor?

Not all doctors are aware or can spot and treat HSP. Go to [sp-foundation.org](http://sp-foundation.org) and click on “Find a Physician” for a list of doctors in your area.

*\*A tip – carry a card in your wallet with all of your drugs and supplements listed. Include any allergies. This will save you lots of time and your doctor will appreciate knowing all of them and if any possible drug interactions.*



NAME  
Address  
Phone #  
RX list + dosage  
Allergies + reactions

## What about Insurance?

Insurance companies are hard to understand normally. Add to it our complicated coverage! Basically, we're going to say, “Try, try, try!” You are your own advocate here. Don't let, “No” be the final word. You never know what can happen. You have nothing to lose—right? One thing that we have learned in dealing with Insurance companies, ALWAYS document WHO you talked to, WHAT TIME AND NUMBER you called, and WHAT WAS THE OUTCOME OR RESULT?



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