How changes in the nervous system affect everyday tasks

A button that is suddenly hard to fasten or a familiar task that is difficult to finish can be worth describing to your clinician. Explain what changed, when it started and which part you need help with.

According to the American Brain Foundation, 1 in 6 people are affected by brain and neurological diseases. The brain is a large, complex organ that works in conjunction with the spinal cord and a network of nerves and neurons to control everything the body does. Brain disorders can affect the entire nervous system or a single neuron. Even a small disruption to normal function can cause noticeable symptoms.

The causes of brain diseases and disorders are as varied and complex as the functions of the brain itself.

Some of the main causes include genetics, lifestyle-related factors, infections, traumatic brain injuries, and environmental influences.

Some common neurological disorders include:

- Parkinson's disease — Signs of Parkinson's disease include slow and stiff movements, tremors, loss of balance, difficulty walking, and speech impairment. It is caused by a loss of dopamine-producing brain cells.
- Huntington's disease — Some brain diseases, such as Huntington's, are caused by genetics. Huntington's can be diagnosed through a clinical exam, family history, or genetic testing. Some of the symptoms are similar to the signs of Parkinson's disease, including involuntary jerking movements, muscle problems, and impaired gait, posture, and balance. Other symptoms include slow or abnormal eye movements and difficulty with swallowing or the physical production of speech.
- Lou Gehrig's disease — Signs of ALS or Lou Gehrig's disease include slurred speech, difficulty swallowing, extreme emotional reactions, hoarseness, tongue atrophy, excess saliva, and difficulty breathing. Unfortunately, there is currently no ALS cure available to patients.
- Multiple sclerosis — Signs of MS include weakness in the arms and legs, blurred vision, speech problems, tremors, and sometimes paralysis. There are MS treatments, but there is no known cure.
- Cerebral palsy — Cerebral palsy causes a person to have difficulty with their movements and maintaining their balance and posture. It is caused by accidental oxygen starvation at birth. Despite there being no current cure, cerebral palsy treatment has been shown to improve the lives of those who have it.

In addition to the conditions listed above, epilepsy, migraine and headache disorders, Alzheimer's disease, dementia, and stroke are all disorders that affect the central and peripheral nervous system.

Complications Of Brain Diseases

Neurological illness can affect emotions and behavior as well as movement or thinking. Anxiety, low mood, irritability, sudden outbursts or unusual beliefs deserve attention. Depression can occur in people living

with multiple sclerosis. Tell the team about changes, when they began, how often they happen and whether they interfere with daily life.

Many neurological diseases, like Parkinson's and multiple sclerosis, are progressive and will become more severe over time, increasing the risk of complications like pain, difficulty sleeping, urinary problems, constipation, changes to blood pressure, and dementia. Some Parkinson's medications and MS treatments minimize the risk and severity of these complications, but they can still become disabling for some patients. Those who suffer from ALS are at risk for pneumonia, aspiration, lung failure, pressure sores, and weight loss.

Long-term complications of many neurological disorders include:

- Loss of capability for self-care
- Loss of mobility
- Diminished ability to maintain relationships
- Difficulty processing speech
- Psychological distress
- Shortened lifespan, which may necessitate gradual end-of-life care
- Heightened risk of infection and disease in general

Complications of neurological disorders can manifest in many different ways and have a profound effect on a person's life, often becoming incapacitating without treatment.

What Does Long-Term Care For Patients With Neurological Disease Look Like?

A person with a neurological disorder may need ongoing physician management, rehabilitation or both. The setting depends on medical stability, level of awareness, safety and the help required with daily tasks.

If a patient has a progress brain disease or neurological disorder, like Parkinson's, ALS, and MS, they may need specialized, long-term care, such as the care provided at a skilled nursing facility.

Neurological conditions may affect strength, movement, speech and swallowing. An assessment can help identify which tasks are difficult and whether specific therapy or dietary precautions are needed.

Difficulty moving or swallowing can increase risks such as falls, pressure injuries or aspiration. Ask what precautions apply and who should supervise activity or meals.

Depending on the person's condition and receiving team's capabilities, the plan may include:

- Brain monitoring
- Patient/family education on the patient's condition and options
- Special precautions to prevent deep vein thrombosis, stress ulcers, aspiration, infection, wounds, and falls
- Respiratory therapy
- Cardiac monitoring
- Nutritional assessment and support
- Pain management

- Rehabilitation in the form of physical, occupational, and speech therapies
- Bowel and bladder training
- Financial planning for extended care
- Home care education for family

Discharge planning considers the person's goals, supervision, equipment, caregiver training and medical follow-up. Ask what would make home or a supported setting a safe next step.

Archived recovery account

This account describes care in an earlier setting. The course, timing and outcome belong to that individual.

On the Road to Recovery

Just two years ago, the patient was independent and able to walk normally. She had previously worked as a pharmacy clerk and lived at home with her husband and family. Sadly, the patient suffers from progressive, disabling multiple sclerosis and was showing increasing signs of MS, such as recurrent falls that stemmed from a gradual loss of sensation in her hips and legs.

The patient had also endured abdominal surgery and developed a complex pressure ulcer from prolonged bed rest, due to her incapacity and loss of mobility. After hospitalization at another facility, she came to the treating hospital to receive physical and occupational therapy and advanced wound care.

The patient's multiple sclerosis treatment was managed by a care team that worked diligently to help her regain strength and participate more fully in her rehabilitation. Her nurses and therapists helped the patient develop a more positive outlook, which fueled her desire to get better. She reported taking more steps and becoming less tired during walking therapy.

The patient also expressed gratitude for being able to attend a special event while still at the treating hospital. During her stay she was able to attend her son's wedding, a goal that mattered to her.

During her stay at the treating hospital, the patient was able to make significant progress and was discharged to a skilled nursing facility to continue getting better before returning home to her family. She looked forward to going home and cooking a favorite meal for her husband.

Resources:

MedlinePlus groups information about conditions affecting the brain, spinal cord and nerves, with links to condition-specific evaluation and treatment information. https://medlineplus.gov/brainandnerves.html

MedlinePlus discusses diseases that affect the brain, their many possible causes and the importance of a clinical assessment for new neurological symptoms. https://medlineplus.gov/braindiseases.html

The National Institute of Neurological Disorders and Stroke offers a condition-by-condition directory for people looking for more information after a neurological diagnosis. https://www.ninds.nih.gov/health-information/disorders

The National Institute of Neurological Disorders and Stroke describes amyotrophic lateral sclerosis, including how it affects movement and the support a person may need over time. https://www.ninds.nih.gov/health-information/disorders/amyotrophic-lateral-sclerosis-als

The CDC provides an overview of cerebral palsy and how it can affect movement, balance and posture throughout a person's life. https://www.cdc.gov/cerebral-palsy/about/index.html

Talk with Lakeview

For questions about a possible stay, call Lakeview Admissions at (262) 534-8509. During a stay, ask the bedside nurse who can help with your question.

https://www.lakeviewsystem.com/brain-injury