

# What are Nervous System Diseases?



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## Types of Nervous System Diseases

- Stroke
- Coma
- Neurological disorders such as (ALS, Parkinson's Disease, Alzheimer's disease and other dementias)
- Neurological malignancies

### Stroke

A stroke occurs when a blood clot or a break in a vessel in the brain causes an interruption of blood flow to an area of the brain. Symptomatology depends on the amount of damage that occurred and the area of the brain that was affected by the stroke.

### Coma

Coma is a deep state of unconsciousness. It can be caused by disease, injury, or poison.

### What is the Prognosis?

Individuals with nervous system diseases may die from:

- sepsis.
- lack of food and fluids as a result of a decision not to insert a feeding tube in a patient that cannot swallow.
- lack of oxygenation as a result of a decision not to initiate mechanical ventilation.
- lack of the ability to maintain a heartbeat or breathe on one's own due to withdrawal of life support.

### Palliative Care

Pharmacological and non-pharmacological interventions should focus on symptomatic relief, prevention of complications, maintenance of maximum function and optimal quality of life.

Psychological and spiritual support is needed to assist caregivers who may be providing full care around the clock care for their loved one. Provide caregivers with resources, respite care and support groups in their area.



## Documentation

During the acute phase immediately following a hemorrhagic or ischemic stroke, any of the following are strong predictors of early mortality and should be documented:

- Coma or persistent vegetative state secondary to stroke, beyond three days duration
- Coma or severe obtundation accompanied by severe myoclonus, persisting beyond three days past the anoxic event
- Comatose patients with any 3 of the following symptoms on day three of coma (97% mortality by two months)
  - ✓ abnormal brain stem response
  - ✓ absent verbal response
  - ✓ absent withdrawal response to pain
  - ✓ serum creatinine > 1.5 mg/dl
  - ✓ age > 70
  - ✓ dysphagia -- document if severe enough to prevent food and fluid intake necessary to sustain life

During the chronic phase, document the following factors which may correlate with poor survival following severe stroke:

- age > 70
- poor functional status, Karnofsky Performance Scale score < 50%
- post-stroke dementia, Functional Assessment Status Tool score > 7
- aspiration pneumonia without effective response to speech therapy interventions
- poor nutritional status, whether on artificial nutrition or not on artificial nutrition
- unintentional progressive weight loss of greater than 10% over past 6 months
- serum albumin less than 2.5 gm/dl (a useful indicator but should not be used alone)

## Documentation Tips

Document all signs and symptoms including onset and change over time. In a patient who has had a stroke, it is important to evaluate stability of symptoms. For patients who have stabilized with need for supportive care only, the prognosis may be very good. Continuous decline in clinical or functional status over time means that the patient's prognosis is poor. Include information which describes impact on overall quality of life and functionality.



Y	N	General Guidelines (all patients)
		Life-limiting condition(s)
		Progression of disease(s)
		Need for frequent medical care
		Dependence in most ADLs
		Weight loss > 10% over past 6 months
		Serum albumin < 2.5 g/dl
		Cholesterol < 156 mg/dl
		HCT < 41 g/dl
		Frequent hospitalizations within the last 6 mos.
		Karnofsky < 50%
		Fast > 7
		Desire/will to die
		Sense of completion/reconciliation
		Willingness to surrender to unknown/letting go
Y	N	CVA and Coma
		LOC : coma, persistent vegetative state
		Dysphagia
		Age > 70
		Dependence in most ADLs, paralysis
		Post-stroke dementia
		Nutritional status (despite feeding tube, if present)
		Medical complications
		Family wants palliative care

## References

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