

4 Cerebrovascular Accident (Stroke)/ Transient Ischemic Attack

Patient name: _____ **Admission:** _____

NRS
DATE INITIAL

--	--

- I. **The client/caregiver can define cerebral vascular accident or stroke.**
 - A. It is a loss of brain function resulting from a disruption of oxygen supply (blood) to a part of the brain.
 - B. Causes of cerebrovascular accident are
 1. Ischemic strokes are caused by a blood clot that blocks the blood flow to area of the brain causing damage.
 - Thrombosis (atherosclerosis, hypertension, and hematologic disorders are typical causes)
 - Embolus (atrial fibrillation, extracranial clot formation, and valvular heart disease are typical causes)
 2. Hemorrhagic strokes are usually caused by the rupture of a blood vessel that can block blood flow to the brain and result in destruction of brain tissue. Hypertension, aneurysm, trauma, vacular malformation, and so forth can be responsible for this type of stroke.
 - C. Damage from a stroke depends on the location of the blockage and the extent of tissue damage.
 - D. Stroke is the third leading cause of death in the United States.
- II. **The client/caregiver can define transient ischemic attack.**
 - A. It is caused by a temporary decrease in blood supply (oxygen) to a part of the brain.
 - B. Signs and symptoms vary depending on the area of the brain affected.
 - C. Signs and symptoms resolve within 24 hours, causing no permanent damage.
 - D. They can be considered a warning sign of impending cerebral vascular accident and should be evaluated promptly.
 - E. At least one third of persons with transient ischemic attacks will have a stroke in the next 3 to 5 years.

NRS
DATE INITIAL

--	--

- III. **The client/caregiver can list factors that increase risk of cerebral vascular accident.**
 - A. Noncontrollable factors
 1. Advancing age
 2. Positive family history
 3. Race (blacks have a higher incidence than whites)
 4. Gender (men have a higher incidence than women)
 5. History of prior stroke
 - B. Controllable factors
 1. Hypertension
 2. Obesity
 3. Diabetes mellitus
 4. Physical inactivity
 5. Elevated blood cholesterol
 6. Smoking
 7. Oral contraceptives
 8. Alcohol consumption abuse
- IV. **The client/caregiver can list signs and symptoms of a stroke. Knowing these symptoms will enable prompt evaluation and treatment. The symptoms can be the same for transient ischemic attacks but last for a shorter period of time and then disappear.**
 - A. Sudden numbness, weakness, or paralysis of face, arm, or leg (usually only on one side of the body)
 - B. Sudden blurred, double, or decreased vision
 - C. Sudden difficulty speaking or understanding speech
 - D. Sudden dizziness and loss of balance or coordination
 - E. Confusion or problems with memory
 - F. Sudden severe and unusual headache with stiff neck, facial pain, vomiting, or altered consciousness
- V. **The client/caregiver can list possible effects of a stroke, which depend on size and location of the injury.**
 - A. Physical effects
 - Muscles that involuntarily contract (spasticity), creating stiffness and tightness

(Continued)

NRS
DATE INITIAL

--	--

- Forty percent of stroke survivors have balance problems
 - Weakness or paralysis of one side of body (hemiplegia)
 - Defects in vision: hemianopia, which is seeing only half of the normal vision field
 - Bowel and bladder incontinence
- B. Communication and swallowing
- Expressive aphasia—inability to speak
 - Receptive aphasia—inability to understand spoken or written language, damage to language center of brain
 - Dysarthria (slurred speech)
 - Agnosia—inability to recognize familiar people or objects
 - Dysphagia (swallowing problems)
 - Short retention of information
 - Difficulty with new learning and impaired short-term memory
 - Problems with abstract thinking
- C. Behavioral
- Depression
 - One-sided neglect
 - Changes in thinking, memory, solving problems, and communication challenges, which can be frustrating to person
 - Easily distracted
 - Impulsive behavior or slow, cautious behavior

VI. The client/caregiver can list measures to prevent a stroke.

- A. Use diet that is low in saturated fat and cholesterol. Cholesterol-lowering medication may be prescribed by physician.
- B. Do not smoke.
- C. If a diabetic, use good management techniques.
- D. Maintain healthy weight. Lose weight if necessary.
- E. Exercise regularly.
- F. Reduce stress.
- G. Drink only in moderation.
- H. Avoid use of illicit drugs.
- I. Discuss risk of using oral contraceptives with physician.
- J. The American Heart Association recommends that risk factor screening (blood pressure, body mass index, waist

NRS
DATE INITIAL

--	--

circumference, and pulse every 2 years) and cholesterol and glucose testing should be done every 5 years after the patient is 20 years old.

VII. The client/caregiver can list measures important in treatment of stroke.

- A. Encouragement and early treatment, which are important
- B. Early rehabilitation program, including physical therapy, occupational therapy, and speech therapy
- C. Active and passive range of motion exercises
- D. Prevention of skin breakdown
- E. Bowel and bladder training
- F. Good nutrition
- G. Emotional support
- H. Safe environment
- I. The use of adaptive equipment for eating, toileting, mobility, and communication

VIII. The client/caregiver can list possible complications.

- A. Seizures
- B. Contractures and pressure sores
- C. Aspiration
- D. Respiratory and cardiac complications
- E. Thrombophlebitis

RESOURCES

American Stroke Association
www.strokeassociation.org

National Institute of Neurological Disorders and Stroke
National Stroke Association
www.stroke.org/

American Heart Association
www.americanheart.org

Support group

Administration on Aging
www.aoa.dhhs.gov

(Continued)

Centers for Medicare & Medicaid Services
www.cms.hhs.gov

National Institute on Aging
www.nia.nih.gov

REFERENCES

Ackley, B. J., & Ladwig, G. B. (2006). *Nursing diagnosis handbook: A guide to planning care*. St. Louis: Mosby Inc.

Canobbio, M. M. (2006). *Mosby's handbook of patient teaching*. St. Louis: Mosby Inc.

Cohen, B. J., & Taylor, J. J. (2005). *Memmler's the human body in health and disease* (10th ed.). Philadelphia: Lippincott Williams & Wilkins.

Lutz, C., & Przytulski, K. (2001). *Nutrition and diet therapy*. Philadelphia: F. A. Davis Company.

Timby, B. K., & Smith, N. C. (2003). *Introductory medical-surgical nursing* (8th ed.). Philadelphia: J. B. Lippincott Williams & Wilkins.