



Presented by

Kendra Menzies Kent, RN-BC, MS, CCRN, CNRN, SCRN, TCRN

Kendra has an extensive and comprehensive knowledge base and is known for her ability to simplify complex material while maintaining audience attention. She received her BSN from the University of Texas in Arlington in 1985 and her MSN as a Clinical Nurse Specialist from Texas Women's University in 1993. Her work includes critical care education for surgical/trauma, neurosurgical and thoracic surgery ICUs. She held positions in management and was a Clinical Nurse Specialist in the SICU at Parkland Memorial Hospital in Dallas. Kendra was a staff nurse in the Neurosurgical ICU at Harris Methodist Hospital, Ft. Worth, Texas, and currently lives in Florida, where she works in the ICUs at St. Mary's Hospital in West Palm Beach. Kendra has presented seminars throughout the country for over 15 years. She is certified by the American Association of Critical Care Nurses, American Neuroscience Nursing, and American Nurses Credentialing Center in Pain Management Nursing and is a Fundamental Critical Care Support Instructor (FCCS) for the Society of Critical Care Medicine.

12.75 Contact Hours | Course Length: 722 minutes

Program Description

This course is designed to prepare the nurse to successfully complete the Stroke Certified Registered Nurse (SCRN®) examination. It is designed as a review course for nurses already providing care to stroke patients. It includes management of strokes from prehospital through rehabilitation. The course is designed according to the test plan.

Program Learning Outcomes

This program prepares the learner to:

1. Discuss the prehospital management of stroke patients, including the EMS decision-making in regards to the transport of the stroke patient.
2. Discuss the acute-care management of ischemic and hemorrhagic strokes in the Emergency Department.
3. Identify goals and management issues of ischemic and hemorrhagic strokes in the ICU, progressive care and floor prior to discharge.
4. Describe common areas of concern for the rehabilitation of stroke patients and discuss different techniques used in rehabilitation to improve the patient's quality of life.
5. Differentiate between the different stroke center certifications and discuss the core measures used to determine quality of care.
6. Identify common neurological medications used in managing stroke patients and be able to discuss indications, contraindications and adverse effects of each.

Topics Covered

1 Introduction/Anatomy and Physiology

100 minutes

Module Description

This review of the brain's anatomy is designed to provide the nurse with information that is pertinent to the clinical bedside care of a stroke patient. It provides a review of the meninges, including herniation syndromes and hematomas. The arterial and venous vascular reviews provide the stroke nurse with clinical signs depending upon the vascular territory involved in the stroke. The review includes primary functions of the lobe of the brain, subcortical area and brain stem.

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the physiology of the uncal and central herniation syndromes and correlate with clinical signs of herniation.
2. Identify clinical signs of an ischemic stroke involving anterior, middle and posterior cerebral artery occlusion.
3. Discuss the clinical findings of a patient following ischemic injury to the frontal, parietal, temporal and occipital lobes.
4. Identify the origination of the cranial nerves.

2 Preventive Care

81 minutes

Module Description

The intent of this module is to provide the participant with the knowledge needed to educate patients regarding the risk factors and prevention strategies for both primary and recurrent, or secondary, strokes. Stroke risks, both modifiable and nonmodifiable, will be presented as well. Talking with patients and their families regarding stroke risk and prevention of strokes will also be covered.

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the issues regarding the development and use of a risk-assessment tool for strokes.
2. List and discuss the nonmodifiable risk factors of a stroke.
3. List and discuss the modifiable risk factors of a stroke.
4. Differentiate between primary and secondary strokes.
5. Discuss management of the following: hypertension, diabetes and dyslipidemia.
6. Describe the diet, nutrition and exercise recommendations.
7. State the American Stroke Association (ASA) recommendations for a carotid endarterectomy (CEA) or carotid artery stenting (CAS) on primary and secondary stroke prevention with carotid artery stenosis.
8. Discuss the use of ASA recommendations in primary and secondary prevention.

3 Hyperacute Care

100 minutes

Module Description

Hyperacute management of strokes includes prehospital and emergency room care. Prehospital care of strokes includes recognition and transportation of patients to the appropriate stroke centers. This module discusses the core measures used to evaluate the response of the EMS system. Telemedicine and teleradiology are used by smaller hospitals to improve stroke care with the consultation of comprehensive stroke centers.

Emergency room management included recognition and diagnosis in a rapid manner. This lecture describes the goals for recognition and the timeline for diagnosis and initiation of fibrinolytic therapy. It also discusses the guidelines for administering rtPA, including indications, contraindications, dosage and evaluation for potential complications.

(continued)

(continued)

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the role of both the dispatcher and EMS providers in dispatching patients to the highest level of care possible within the shortest amount of time.
2. Describe the prehospital-focused history and assessment performed by EMS.
3. Describe the four different methods for administering fibrinolytic therapy in telemedicine.
4. Identify the most important history used to determine indication for rtPA and discuss the window of opportunity for administering fibrinolytic therapy.
5. Discuss the dose and calculation of the rtPA therapy and state the guidelines for monitoring during and after administration.
6. Describe the stroke syndromes and identify common symptoms of each syndrome.
7. Describe the approved interventional management of ischemic strokes.

4 Diagnostics

55 minutes

Module Description

This module describes the diagnostic procedures used to rule out other causes of neurological deficits and rule in hemorrhagic and ischemic strokes. It provides advantages and disadvantages for each diagnostic procedure. The module includes newer MRI and CT modalities and their roles in stroke management.

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the purpose of a noncontrast CT scan in evaluating an acute ischemic and hemorrhagic stroke.
2. Discuss the pros and cons of different vascular imaging techniques.
3. Identify the indications and describe the technique of Transcranial Doppler (TCD) studies.
4. Describe the newer MRI and CT modalities and discuss their future role in stroke management.

5 Acute Care

232 minutes

Module Description

Acute care of stroke patients begins upon admission to the hospital on a monitored bed and continues until the time of discharge. This module addresses recommendations in managing an acutely ill stroke patient in the ICU and treating increased intracranial pressure (ICP). Acute-stroke care discussion includes hemorrhagic strokes, both intracerebral and subarachnoid hemorrhages. They are reviewed in regard to risk factors, presentation, diagnosis, treatment and complications. Other causes of strokes, including cerebral venous thrombosis, Moyamoya disease, arterial dissection and cavernous malformations are presented in this section. It also includes neuroendocrine disorders of diabetes insipidus (DI), syndrome of inappropriate antidiuretic hormone secretion (SIADH) and cerebral salt-wasting syndrome (CSW).

Module Learning Outcomes

This module prepares the learner to:

1. Identify the treatment goals of caring for an ischemic stroke within the acute period following the injury.
2. Discuss the complications of a cerebral edema and identify interventions utilized to lower the ICP.
3. Identify two of the common infections that may occur following a stroke.
4. Distinguish between an intracerebral and subarachnoid hemorrhage.
5. Identify the most common etiology and site of an intracerebral hemorrhage.
6. State the most common cause of a subarachnoid hemorrhage and describe the classification of aneurysms.
7. Identify the timing of the common complications following a subarachnoid hemorrhage including vasospasms, rebleeds and cerebral edema.
8. State the treatment for cerebral venous thrombosis and cerebral vasculitis.
9. Discuss the causes and diagnosis of Moyamoya disease.
10. Differentiate between the two different causes of hyponatremia following a stroke.
11. Discuss the diagnosis of diabetes insipidus (DI) and identify appropriate treatment.

(continued)

(continued)

6 Neurological Medications

82 minutes

Module Description

This module will provide the participant with information regarding common medications administered to ischemic and hemorrhagic stroke patients. It discusses the physiology, indications, contraindications and adverse effects of these common medications. Current stroke guidelines will be discussed regarding each class of medication.

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the current guidelines regarding the administration of fibrinolytics, heparin and antiplatelet agents following an ischemic stroke.
2. Describe the characteristics of a heparin-induced thrombocytopenia (HIT) and discuss the management of the complication.
3. State the indications for administration of mannitol (Osmitrol) and identify common laboratory values to monitor.
4. Discuss the use of antihypertensive and vasoconstrictors in hemorrhagic strokes and vasospasms.
5. Describe the reversal process of the anticoagulants and antiplatelet agents.

7 Post-Acute Care

46 minutes

Module Description

If rehabilitation for stroke patients begins after the patient is transferred to a rehabilitation facility, multiple complications and delays in therapies can negatively affect the patient's outcomes. Nurses working in acute care settings should be familiar with basic rehabilitation principles that may be initiated early. This session will provide the acute care nurse with information needed to initiate the rehabilitation process early and prevent complications that may delay transfers and discharges.

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the goals of rehabilitation.
2. Describe the positioning of a stroke patient with a hemiparesis/paralysis in the following positions: affected side, unaffected side, back and chair.
3. List two ways to lower the risk of falls in stroke patients.
4. Discuss the emotional impact of aphasia and communication abnormalities.

8 Systems and Quality Care

26 minutes

Module Description

This module provides an overview of the differences between acute stroke-ready hospitals (ASRHs), primary stroke centers (PSCs) and comprehensive stroke centers (CSCs). It provides discussion on the advantages of treating higher-risk stroke patients in a comprehensive center. The course also reviews core measures used to evaluate the care provided in primary and comprehensive stroke centers.

Module Learning Outcomes

This module prepares the learner to:

1. State the differences between an ASRH and a primary stroke center.
2. Discuss the additional aspects required in a comprehensive stroke center.
3. State two advantages of treating a high-risk patient in a comprehensive stroke center.
4. Identify the eight core measures and discuss the goals in each measure.

Accreditation

RN/LPN/LVN/Other: 12.75 Contact Hours

MED-ED, Inc. is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation (**ANCC**).

MED-ED, Inc. is an approved provider by the following State Boards of Nursing: **Florida**/FBN 50-1286, **Iowa**/296, **California** #CEP10453.

If your profession is not listed, we suggest contacting your board to determine your continuing education requirements and ask about reciprocal approval. Many boards will approve this seminar based on the accreditation of the boards listed here.

© 2018 MED-ED, Inc. All rights reserved.

