

Presented by

Kendra Menzies Kent, MS, RN-BC, 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, TX, 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: 726 minutes

Program Description

The CNRN Exam Review course is designed to provide the neuroscience nurse a review of the topics presented in the CNRN Examination. The course outline is based upon the blueprint of the CNRN Examination provided by ABNN. The course provides the participant with hints and easy ways to remember certain pertinent information.

Program Learning Outcomes

This program prepares the learner to:

1. Describe the CNRN Exam, test plan and the practice requirements to sit for the exam.
2. Construct a study plan for the exam based on understanding the blueprint and domains of practice covered.
3. Identify common mistakes and pitfalls that are made during studying and testing for the exam.
4. Recall the core components covered in the exam through didactic supplementation and test questions.

Topics Covered

1 Introduction

10 minutes

2 Neurotrauma

128 minutes

Module Description

Neurotrauma, involving the brain and spinal cord, can be a devastating injury. The neuroscience nurse needs to be prepared to intervene in the acute setting to stabilize and prevent further injury. Recognition of early clinical changes indicating an onset of a complication is important for the nurse caring for these patients and can make a difference in the neurological outcome. Once stabilized, the neurotrauma patient will begin the rehabilitation phase, which may continue for the rest of his or her life. This session will provide the participant with knowledge in caring for the neurotrauma patient and includes the acute care management, recognition of complication and rapid responses to prevent further injury. The session also addresses some of the long-term rehabilitation issues of the traumatic brain and spinal cord injury.

Module Learning Outcomes

This module prepares the learner to:

1. Discuss the care provided for a patient with a basilar skull fracture, and identify potential complications.
2. Differentiate primary from secondary traumatic brain injuries, and discuss the management of the secondary injuries.
3. Describe mechanisms of injury, presentation and rehabilitation of the partial spinal cord injuries: central cord syndrome, anterior cord syndrome and Brown-Séquard cord syndrome.
4. Discuss the complications of spinal cord injury including spinal shock, neurogenic shock and autonomic dysreflexia.

3 Seizures

53 minutes

Module Description

Seizures can be a complication of any neurological disorder and may range from subtle changes, such as eyelid fluttering, to more generalized tonic-clonic seizures. The neuroscience nurse needs to be knowledgeable in the different presentation of seizures to recognize the onset of a seizure and to be able to care for the patient during a seizure to prevent injury and assist with stopping the seizure. This session will provide the participant with the knowledge of the presentation of both partial and generalized seizures and management of the patient during the seizure.

Module Learning Outcomes

This module prepares the learner to:

1. Describe the differences between the following classifications of seizures: simple partial, complex partial and generalized.
2. Discuss the care provided to a patient experiencing a seizure and review the antiepileptic medications given to the patient to stop the seizure.
3. Discuss the care provided to a patient after a seizure and identify some of the issues and complications that may occur during the postictal period.

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4 Cerebrovascular

137 minutes

Module Description

A cerebrovascular injury is a life-threatening situation and requires the rapid assessment and interventions to save lives and prevent further neurological injury that could have a devastating impact on the quality of the patient's life. The neuroscience nurse needs to be able to recognize neurological changes and be able to perform a more detailed neurological assessment to recognize future rehabilitation needs of the patient. Education of the patient and family in prevention strokes is also a role of the neuroscience nurse. This session will provide knowledge on the early recognition of a stroke and rapid interventions recommended to prevent further neurological injury. It also focuses on neurological assessment, nursing management issues and rehabilitation of a stroke. The cerebrovascular injuries addressed includes ischemic strokes (embolic and thrombotic), hemorrhagic strokes and subarachnoid hemorrhages due to aneurysms, AVMs and central venous thrombosis.

Module Learning Outcomes

This module prepares the learner to:

1. Identify the risk factors for an ischemic stroke, and differentiate between a thrombotic and embolic stroke.
2. Discuss the priorities of care for identifying an ischemic stroke and the timeline for providing care to recanalize an obstructed cerebral artery.
3. Discuss the most common presentation of a hemorrhagic stroke, and identify risk factors and prognosis.
4. Analyze the effectiveness of surgical management for hemorrhagic strokes versus medical management.
5. Identify the different types of intracerebral aneurysms, and discuss the diagnosis following the identification of a subarachnoid hemorrhage.
6. Describe the two most significant complications of a subarachnoid hemorrhage: rebleeds and vasospasms.

5 Pediatric and Developmental

63 minutes

Module Description

Neuroscience nursing specialty also covers the full range of patient ages, from caring for newborns through caring for the elderly. Several of the neurological disorders are present at the time of birth and will affect the patient throughout his or her life. The neuroscience nurse needs to be knowledgeable of these neurological disorders that are developmental in aspect of recognition of signs, acute and long-term management and prevention of complications. Improvement in quality of life is a major aspect of nursing management in these disorders. The topics covered in this session include Chiari malformations, cerebral palsy and spina bifida (syringomelia, myelomeningocele). This session provides the knowledge for the neuroscience nurse in the recognition and management of the previously listed neurological disorders.

Module Learning Outcomes

This module prepares the learner to:

1. Compare and contrast the different types of Chiari malformations, and discuss the ages of presentation of each type.
2. Identify the symptoms of the type II Chiari malformation, and discuss the underlying etiology of each symptom.
3. Identify the risk factors for cerebral palsy, and discuss the underlying etiology.
4. Differentiate the types of cerebral palsy, and discuss the pathophysiology of each type.
5. Identify the different types of spina bifida and discuss the risk factors and potential causes of spina bifida.

6 Chronic Neurological

131 minutes

Module Description

The specialty of neuroscience nursing involves a large range of neurological disorders, and the neuroscience nurse needs to be able to recognize the signs of these disorders and be familiar with the impact they may have on the quality of the patient's life. The nurse needs to also be knowledgeable in the medical management and the nursing management of the disorders. The subjects addressed include neurological disorders such as trigeminal neuralgia, Ménière's disease, normal pressure hydrocephalus and acute hydrocephalus, motor disorders such as Parkinson's disease and dementias. It also includes discussion on identifying and managing neuropathic pain. This session provides the neuroscience nurse with the knowledge of these neurological disorders in regard to recognition, assessment, medical management, nursing management and rehabilitation issues.

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Module Learning Outcomes

This module prepares the learner to:

1. Identify the causes of trigeminal neuralgia, and discuss the aspects of the pain syndrome associated with trigeminal neuralgia
2. Describe the symptoms of Ménière's disease, and identify some of medical and surgical management available to manage the balance disorder.
3. State the three signs of normal pressure hydrocephalus and identify underlying etiology.
4. Discuss the pharmacological and complementary management of neuropathic pain and identify psychosocial issues associated with the neuropathies.
5. Compare and contrast cortical and subcortical dementia and identify the four stages of Alzheimer's disease..

7 CNS Tumors

56 minutes

Module Description

The diagnosis of a CNS tumor can be overwhelming to both the patient and family members. The terminology used when discussing brain tumors and the names of the different tumors can cause fear and confusion with the patients. Neuroscience nurses need to be knowledgeable in the different types of CNS tumors, including knowledge on the tissue origin of the tumor, the tumor's progression, common signs and predicted management of the tumor. Education and support of the patient and family members is a part of the nursing care when managing a patient with a CNS tumor. This session will review the anatomy of brain cells in relation to the different types of primary brain tumors and provides knowledge on some of the different types of tumors in relation to presentation, management and predicted outcomes.

Module Learning Outcomes

This module prepares the learner to:

1. Identify the different types of cells that make up the neuroglial cells of the brain.
2. Discuss the differences between benign and malignant brain tumors, and compare to other types of tumors.
3. Compare and contrast primary to secondary brain tumors, and discuss the role of biopsy in diagnosis.

8 Immune/Infections

145 minutes

Module Description

CNS infections are life-threatening and require immediate recognition and management. The neuroscience nurse must be proficient at recognizing the onset of a CNS infection and respond rapidly to assist with the identification of the underlying disorder and providing immediate medical and nursing management of the patient. This session provides the neuroscience nurse with the knowledge regarding the underlying etiology of multiple different CNS infectious sources as well as the information to rapidly manage these disorders.

Caring for the neurological disorders involving the immune system can range from the chronic management issues to acute, life-threatening crisis. The immunological disorders discussed in this section, which affect the neurological system; include myasthenia gravis, multiple sclerosis, Guillain-Barré and amyotrophic lateral sclerosis (ALS). The neuroscience nurse, caring for the patient with one of these disorders, requires knowledge in the underlying physiology to understand the management and provide education to patients and their family members. This session provides the physiology as well as the assessment and management of the patient with an immunologically caused neurological disorder. It also provides knowledge in the recognition of the crisis and support of the patient during the crisis.

Module Learning Outcomes

This module prepares the learner to:

1. Compare and differentiate the CSF analysis of bacterial to viral meningitis.
2. Identify the signs of bacterial meningitis, and discuss the cranial nerve involvement in both the acute and long term periods.
3. Discuss the etiology, presentation and management of the following neurological abnormalities: multiple sclerosis, myasthenia gravis, Guillain-Barré syndrome and ALS.
4. Describe the physiology of the prion encephalopathies, and identify the three different ways to develop Creutzfeldt–Jakob disease (CJD).
5. Define an encephalopathy, and discuss certain symptoms specific to different types of encephalopathies.

Accreditation

RN/LPN/LVN/Other: 12.75 Contact Hours

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