Florida CTE

Electrocardiograph Technician 3

Describe the cardiovascular system. -- The student will be able to: 1.0	**1** Locate the heart and surrounding structures. 1.1
	2 Diagram and label the parts of the heart and list the functions of each labeled part. 1.2
	3 Trace the flow of blood through the cardiopulmonary system. 1.3
	4 Identify and describe the electrical conduction system. 1.4
	5 Describe the function of the autonomic nervous system. 1.5
	6 Describe signs and symptoms of a patient demonstrating poor perfusion or low cardiac output and state the importance of rapid reporting. 1.6
Identify legal and ethical responsibilities of an EKG technician. -- The student will be able to: 2.0	**1** Recognize and practice legal and ethical responsibilities as they relate to an EKG aide. 2.1
	2 Maintain a safe and efficient work environment. 2.2
	3 Maintain EKG equipment so it will be safe and accurate. 2.3
	4 Implement appropriate Joint Commission patient safety goals and adhere to HIPAA regulations regarding Protected Health Information (PHI). 2.4
Demonstrate knowledge of, apply and use medical instrumentation modalities. -- The student will be able to: 3.0	**1** Calibrate and maintain EKG equipment in the work environment. 3.1
	2 Identify three types of lead systems standard/limb, augmented, and precordial/chest). 3.2
	3 State Einthoven's triangle. 3.3
	4 Demonstrate proper lead placement including lead placement with special considerations for various patients with special needs to include pediatric, amputee, and posterior and right sided EKGs. 3.4
	5 Identify artifacts and mechanical problems. 3.5
	6 Perform a 3, 5, and 12 lead EKG. 3.6

	7 Recognize normal sinus rhythm. 3.7
	8 Report dysrhythmias that are not normal sinus rhythm. 3.8
	9 Recognize signs and symptoms of cardiopulmonary compromise on the EKG tracing and understand the importance of rapid reporting. 3.9
	10 Verify accuracy of lead placement on the EKG. 3.10
	11 Verify setting on the EKG machine such as paper speed, sensitivity (gain), and Hertx (Hz) prior to use. 3.11
Perform patient care techniques in the health care facility. -- The student will be able to: 4.0	1 Describe the physical and mental preparation of the patient for EKG testing. 4.1
	2 Identify patient and verify the requisition order. 4.2
	3 Prepare patient for cardiovascular diagnostic testing. 4.3
	4 Obtain patient's vitals (temperature, pulse, respirations, blood pressure, and pulse oximetry) in preparation for cardiovascular diagnostic testing and report abnormalities. 4.4
	5 State precautions required when performing cardiovascular diagnostic procedures. 4.5
	6 Convey the importance of maintaining a safe patient environment and evaluate potential hazards in the work environment. 4.6
Recognize normal and abnormal monitoring and testing results. -- The student will be able to: 5.0	1 Inspect and measure the various waveforms of a cardiac cycle including, segments, complexes, heart rates and intervals. 5.1
	2 Identify electrical axis. 5.2
	3 Recognize pacemaker spikes on the EKG and state the purpose of pacemakers. 5.3
	4 Recognize normal and deviations from normal sinus rhythms. 5.4
	5 Recognize all atrial rhythms. 5.5
	6 Recognize all junctional rhythms. 5.6
	7 Recognize all ventricular rhythms. 5.7
	8 Recognize all types of heart blocks. 5.8
	9 Recognize normal and deviations from single chamber and dual chamber pacemakers as well as all implantable cardioverter defibrillators. 5.9
	10 Identify myocardial ischemia, injury, and infarction on EKG tracing. 5.10

	11 Recognize atrial and ventricular hypertrophies. 5.11
	12 Recognize ectopic beats and any rare phenomena. 5.12
	13 Recognize normal and deviations from normal 12 lead EKG results. 5.13
	14 Describe potential patient responses to all dysrhythmias and other EKG abnormalities. 5.14
	15 Recognize and respond promptly to life threatening dysrhythmias during continuous monitoring such as telemetry. 5.15
Describe cardiovascular drugs, their actions, use and adverse effects. -- The student will be able to: 6.0	1 Describe the mechanisms by which common cardiovascular drugs work including actions and adverse effects. 6.1
	2 Differentiate between normal and abnormal EKG changes potentially due to drugs. 6.2
Demonstrate knowledge of other cardiovascular diagnostic modalities. -- The student will be able to: 7.0	1 Demonstrate knowledge of the application of a Holter Monitor and provide patient education of its use. 7.1
	2 Demonstrate the procedures for preparing the patient for stress testing/scanning exercise treatment and provide patient education. 7.2
	3 Understand and demonstrate patient documentation for all types of monitoring. 7.3
	4 Describe other modalities of cardiovascular diagnosis and interpretation. 7.4
	5 Maintain patient cardiac alarm policy at all times as per acceptable facility guideline. 7.5