

Circulation Module Goals - Revised 2019

Module Goal	With respect to the following systems/processes	School of Medicine Sub-competency	Disciplines
CIR.A Recognize the normal structures and explain the normal function of the heart, cardiac cycle, and hemodynamics (2.1.1, 2.1.2, 2.1.4, 2.1.5).	• Organ Structures and functions -Chambers and Valves, Cardiac Cycle (mechanics, heart sounds, cardiac conduction), Hemodynamics (Blood Volume, systemic vascular) Circulation in specific vascular beds • Cell/tissue structure and function -heart muscle, endothelium and secretory function	2.1.1 Demonstrate knowledge of the normal structure, metabolism, and function of the molecules that compose the human body. 2.1.2 Demonstrate knowledge of normal cellular structure and function of the human body. 2.1.4 Demonstrate knowledge of normal structure and function of human organ systems. 2.1.5 Demonstrate knowledge of the mechanisms that maintain homeostasis.	Physiology Anatomy Histology
CIR.B Construct a framework for understanding and classifying common diseases and disorders of the circulatory system that incorporates epidemiology, pathogenesis, and pathophysiology (1.7.6, 2.6.1, 2.6.2, 2.2.1, 2.2.2, 2.2.4, 2.2.5).	• Infectious disorders • Immunologic and Inflammatory disorders • Neoplasms • Dysrhythmias • Heart Failure • Ischemic Heart Disease • Diseases of the myocardium • Diseases of the pericardium • Vascular heart disease • Hyper-/hypo-tension • Dyslipidemia • Disorders of the great vessels • Peripheral arterial disease • Diseases of the veins • Traumatic/mechanical disorders • Congenital disorders	1.7.6 Demonstrate an understanding of how lifestyle impacts health. 2.6.1 List the epidemiologic factors that place a person or population at risk for a common condition or disorder. 2.6.2 List the epidemiologic factors that affect transmission or development of a common condition or disorder. 2.2.1 Demonstrate knowledge of the abnormal structure, metabolism, and function of the molecules that compose the human body. 2.2.2 Demonstrate knowledge of abnormal cellular structure and function of the human body. 2.2.4 Demonstrate knowledge of abnormal structure and function of human organ systems. 2.2.5 Demonstrate knowledge of the mechanisms that disrupt homeostasis.	Physiology Pathology Adult Health Child Health Biochemistry Microbiology Genetics
CIR.C Synthesize biomedical information including clinical	• History • Physical Exam • ECG	2.3.1 Given a common condition or disorder, list the symptoms a patient might experience.	Radiology Pathology

and laboratory data in order to diagnose common diseases and disorders of the circulatory system (2.3.2, 2.3.3, 3.4.0, 3.6.2, 3.6.3, 3.6.5).	• CXR • Echocardiogram	2.3.2 Given a common condition or disorder, list the findings that might be identified on physical exam. 2.3.3 Given a common condition or disorder, list the findings that might be identified on laboratory analysis. 3.4 Perform basic interpretation of commonly used diagnostic tests. 3.6.2 Given a patient with a particular chief complaint, medical history, and physical exam findings, list an appropriate differential diagnosis. 3.6.3 Given a patient whose history and physical exam lead to particular differential diagnosis, list the initial studies that should be ordered, including laboratory, radiological and other studies or procedures. 3.6.5 Utilize the information gained by history, physical exam, laboratory tests, radiology tests, and other studies or procedures to determine an appropriate diagnosis.	Clinical Skills
CIR.D Determine and justify prevention and treatment strategies for common diseases and disorders of the circulatory system (2.6.3, 2.4.1, 2.4.2).	Prevention and treatment strategies for diseases listed above (Goal B). Pharmacotherapeutic agents with knowledge of mechanism of action, clinical indications, adverse effects, for the treatment of: - Hypertension - Heart Failure - Angina - Hyperlipidemia	2.6.3 List the strategies to control and prevent a common condition or disorder. 2.4.1 Demonstrate knowledge of basic pharmacologic principles. 2.4.2 List the routine medications that might be used to manage a common condition or disorder.	Pharmacology Adult Health Child Health
CIR.E Explore the impact of clinical and translational research on treatments including pharmacotherapy for common diseases and disorders of the	• Coronary Artery Disease • Lipid Metabolism	2.5.2 Describe the role and importance of clinical and translational research in the care of patients.	Translational Research

circulatory system (2.5.2).			
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