Cardiovascular Pathophysiology

Presentation guide

CC = Statement of the competence for a core competence

E = Elements of the competence for a specific statement of competence

P = Performance criteria for competency; associated with a specific element of the competence

Core Competence CC.6

Differentiate between the pathophysiology of diseases and disorders of the cardiovascular system as it pertains to respiratory therapy

* Note, that for each of the diseases and disorders of the cardiovascular system, knowledge of the following distinct features may be expected in addition to the particular Performance Criteria for competency.

Those distinct features are:

- Definition
- Epidemiology
- Risk factors
- Etiology
- Pathophysiology
- Clinical manifestations
- Laboratory and other findings
- Differential diagnosis
- Management
- Prognosis
- Prevention

E.1 Explain coronary atherosclerotic heart disease

P1.1 Describe coronary atherosclerotic disease per distinct features *

E.2 Compare valvular heart disorders

- P2.1 Describe the following valvular heart disorders:
 - Tricuspid stenosis, incompetence, regurgitation
 - Mitral stenosis, incompetence, regurgitation
 - Aortic stenosis, incompetence, regurgitation
 - Pulmonary stenosis, incompetence, regurgitation

P2.2 Compare the above valvular heart disorders per distinct features *

E.3 Compare inflammatory heart disorders

- P3.1 Describe the following inflammatory heart disorders:
 - Pericarditis
 - Endocarditis
 - Myocarditis
 - Cardiomyopathies

Dilated

Hypertrophic

Restrictive

P3.2 Distinguish the above inflammatory heart disorders per distinct features *

E.4 Compare peripheral vascular disorders

P4.1 Describe the following peripheral vascular disorders:

Arterial

- Arteriosclerosis
- Arterial thrombosis and embolism
- Aneurysm
- Aortic dissection
- Arterioplastic disease (Raynaud's)
- Pulmonary embolism

Venous

- Thrombophlebitis
- Deep venous thrombosis
- Varicose veins
- P4.2 Distinguish the above peripheral vascular disorders per distinct features *

E.5 Compare congenital heart defects

- P5.1 Describe the following congenital heart defects:
 - Atrial septal defect
 - Aortic stenosis
 - Coarctation of the aorta
 - Hypoplastic left/right ventricle
 - Patent ductus arteriosus
 - Pulmonary stenosis
 - Right ventricular outflow tract obstruction
 - Tetralogy of Fallot

- Total anomalous pulmonary venous return
- Transposition of the great vessels
- Tricuspid atresia
- Truncus arteriosus
- Ventricular septal defect
- P5.2 Distinguish the above congenital heart defects per distinct features *

E.6 Compare the types of shock

- P6.1 Describe the following types of shock:
 - Anaphylactic
 - Cardiogenic
 - Distributive
 - Hypovolemic
 - Neurogenic
 - Septic
- P6.2 Distinguish the above types of shock per distinct features *

E.7 Compare the cardiovascular abnormalities

- P7.1 Describe the following cardiovascular abnormalities:
 - Hypertension
 - Myocardial infarction
 - Congestive heart failure
 - Rheumatic heart disease
 - Dissemination intravascular coagulation
- P7.2 Distinguish the above cardiovascular abnormalities per distinct features *