

HANDOUT #1

CONCEPT INTRODUCTION PRESENTATION: PERFUSION

Topic	Description
Definition of Perfusion	The passage of oxygenated capillary blood through body tissues. <i>Peripheral</i> perfusion is passage (flow) of blood to the extremities of the body. <i>Central</i> perfusion is passage (flow) of blood to major body organs, including the heart and lungs.
Scope of Perfusion	Perfusion can be viewed on a continuum as adequate on one end and inadequate, decreased, or impaired on the other. Decreased Perfusion can range from minimal to severe. <i>Ischemia</i> refers to decreased Perfusion, while <i>infarction</i> is complete tissue death due to severe decreased Perfusion.
Risk Factors/Populations at Risk for Impaired Perfusion	Examples of risk factors or populations at risk for impaired Perfusion can be categorized as modifiable (can be changed) and nonmodifiable (cannot be changed) <i>Modifiable</i> factors include: · Obesity

	<ul style="list-style-type: none">· Lack of physical activity/sedentary lifestyle· Smoking <p><i>Nonmodifiable</i> factors include age, gender, and race/ethnicity. Groups at risk for impaired Perfusion include those who are of advanced age (due to less elastic arterial vessels as a result of aging) and those who are African American and Hispanic. These racial/ethnic groups are most at risk for chronic diseases that can affect Perfusion such as diabetes mellitus, hypertension, hyperlipidemia, and peripheral vascular disease. The cause of these variations is not known, but dietary and environmental factors may contribute to the higher incidence of chronic disease in these groups.</p> <p>Newborns and infants who have congenital heart anomalies are also at risk for impaired central Perfusion. Many of these defects can be surgically repaired to regain adequate Perfusion.</p>
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<p>Physiologic Consequences of Impaired Perfusion</p>	<p>Consequences of impaired Perfusion vary depending on the degree of impairment.</p> <p>Inadequate <i>peripheral</i> Perfusion most often occurs in the lower extremities. The distal legs become cool and pale or cyanotic. Pedal pulses may be diminished or absent. If not treated, inadequate Perfusion can result in skin ulcers or cell death such as gangrene.</p> <p>Inadequate <i>central</i> Perfusion can result in life-threatening systemic events such as acute myocardial infarction, heart failure, stroke, and shock as a result of blood flow to major organs.</p>
<p>Assessment of Perfusion Status</p>	<p>Perform a focused cardiovascular assessment and complete history. Assess for signs and symptoms of impaired <i>peripheral</i> Perfusion, including decreased hair distribution, pallor, coolness, and/or cyanosis of the extremities.</p> <p>Document the presence and quality of distal peripheral pulses.</p> <p>Assess for signs and symptoms of inadequate <i>central</i> Perfusion including dyspnea, dizziness or syncope, and chest pain.</p>

	<p>Signs and symptoms of impaired cardiac output include hypotension, tachycardia, diaphoresis, anxiety, cyanosis, listlessness/weakness, decrease in cognitive function, and/or dysrhythmias.</p>
<p>Health Promotion Strategies to Prevent Impaired Perfusion</p>	<p>Teach patients to follow a healthy lifestyle, including good nutritional habits, avoidance of smoking, and adequate exercise. Patients at risk for chronic diseases such as hypertension and diabetes should be monitored carefully for early indications of these conditions.</p>
<p>Nursing Interventions for Patients with Impaired Perfusion</p>	<p>Nursing interventions focus on collaboration with the interprofessional health care team to determine the cause of impaired or inadequate Perfusion. For patients who have impaired Perfusion, the primary health care provider may prescribe vasodilating drugs to promote blood flow. For many patients, however, a vascular intervention to open the occluded or narrowed artery is performed. This type of procedure can be done to open coronary arteries (central perfusion) or peripheral</p>

	<p>arteries, such as the femoral or pelvic arteries in the leg.</p> <p>The priority for nursing care includes:</p> <ul style="list-style-type: none"> • Frequent monitoring of the patient's Perfusion and Oxygenation/Gas Exchange status to recognize and document even subtle changes in condition • Prompt action if Perfusion or Oxygenation status deteriorates. If the patient is not receiving oxygen therapy, initiate oxygen, place the patient in a sitting position, and notify the Rapid Response Team immediately.
Interrelated Concepts	Oxygenation/Gas Exchange