

TOPIC	LEARNING OBJECTIVES	CLINICAL SETTING
General	<ul style="list-style-type: none"> <li>• Describe the anatomy and physiology of the arterial, venous and lymphatic systems</li> <li>• Describe the changes that occur in the vascular system with ageing</li> <li>• Demonstrate a peripheral vascular assessment               <ul style="list-style-type: none"> <li>- proper use of doppler</li> <li>- identification of assessment point for arterial and venous pulses</li> </ul> </li> <li>• Describe the pathophysiology of atherosclerosis and its risk factors</li> <li>• Demonstrate knowledge of common vasculopathic diseases/syndromes:               <ul style="list-style-type: none"> <li>- Buergers Disease</li> <li>- May-Thurner Syndrome</li> <li>- Raunauds</li> <li>- Nutcracker syndrome</li> <li>- Paget-Schroetter syndrome</li> </ul> </li> <li>• Demonstrate knowledge of vascular diagnostic studies</li> <li>• Identify and discuss medication classes used to treat vascular disease; including nursing parameters for monitoring and key patient education points</li> </ul>	
Lower Extremity Arterial Disease	<ul style="list-style-type: none"> <li>• Discuss symptoms of PAD and diagnostic testing</li> <li>• Describe medical management of PAD including best medical therapy, angiogenesis, walking programs</li> <li>• Discuss different anticoagulants used post revascularization and their specific considerations for patient teaching</li> <li>• Identify differences in the management of acute vs chronic disease</li> <li>• Discuss assessment and verbalize clinical findings that would trigger notification of management team</li> <li>• Demonstrate assessment/discuss findings that would suggest development of compartment syndrome</li> <li>• Differentiate/discuss post-intervention care for various interventions:               <ul style="list-style-type: none"> <li>- atherectomy</li> <li>- femoral endarterectomy</li> <li>- thrombolysis</li> <li>- embolectomy</li> <li>- thrombectomy</li> <li>- angioplasty/stenting</li> <li>- bypass graft/arterial reconstruction</li> </ul> </li> </ul>	Outpatient Critical care Acute care Interventional radiology Rehab
Upper Extremity Occlusive Disease	<ul style="list-style-type: none"> <li>• Discuss symptoms of UE occlusive disease</li> <li>• Describe testing (duplex vs doppler)</li> <li>• Demonstrate thorough assessment</li> <li>• Discuss the role partnering with hand specialist plays in your institution</li> <li>• Discuss different anticoagulants used post revascularization and their specific considerations for patient teaching</li> </ul>	Outpatient Acute care
Arterial ulcers	<ul style="list-style-type: none"> <li>• Discuss wound care of arterial ulcers               <ul style="list-style-type: none"> <li>- debridement</li> <li>- dressings</li> <li>- pain control</li> </ul> </li> </ul>	Outpatient Critical care Acute care Rehab
Carotid Artery Disease	<ul style="list-style-type: none"> <li>• Perform and document focused neuro exam</li> <li>• Discuss role of imaging (duplex vs CTA)</li> <li>• Describe best medical therapy</li> <li>• Discuss Invasive treatment options</li> <li>• Demonstrate knowledge of standards of care post endarterectomy and stenting</li> <li>• Discuss patient /family discharge teaching following intervention including reperfusion headaches, TIA/CVA, pharmacotherapy</li> </ul>	Outpatient Critical care Acute care Interventional radiology Rehab

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Mesenteric Ischemia	<ul style="list-style-type: none"> <li>• Discusses patient population at risk</li> <li>• Performs GI Assessment and Documentation</li> <li>• Discusses abnormalities with appropriate medical team</li> </ul>	Outpatient Critical care Acute care Interventional radiology
Aneurysmal Disease	<ul style="list-style-type: none"> <li>• Discuss difference between type A and type B aortic dissection</li> <li>• Discuss medical management of dissection with HR and BP control (what medications does your institution use)</li> <li>• Discuss Surgical vs Endovascular Interventions</li> <li>• Postoperative considerations               <ul style="list-style-type: none"> <li>- Bleeding</li> <li>- Spinal Cord Injury                   <ul style="list-style-type: none"> <li>· Lumbar Drain</li> </ul> </li> <li>- Acute Kidney Injury</li> <li>- Mesenteric Ischemia</li> <li>- Blood Pressure Management</li> </ul> </li> </ul>	Outpatient Critical care Acute care Interventional radiology Rehab
Renovascular Disease and Ischemic Nephropathy	<ul style="list-style-type: none"> <li>• Discuss how ischemic renal disease leads to renal insufficiency</li> <li>• Discuss the relation between renal artery stenosis and HTN</li> <li>• Discuss management of nephropathy</li> </ul>	Outpatient Critical care Acute care Interventional radiology Rehab
Vascular Access	<ul style="list-style-type: none"> <li>• Describe options of vascular access and the fistula first initiative</li> <li>• Demonstrate how to assess AVF/AVG</li> <li>• Describe potential complications (aneurysms, stenosis)</li> <li>• Discuss what you may learn from dialysis RN that would signal you there is an issue with the access (venous pressures, long bleeding times)</li> </ul>	
Thoracic Outlet Syndrome	<ul style="list-style-type: none"> <li>• Describe the pathophysiology of TOS</li> <li>• Discuss post op considerations               <ul style="list-style-type: none"> <li>- pain control</li> <li>- lymphatic leak</li> <li>- PT/OT</li> </ul> </li> </ul>	Outpatient Acute care
Deep Vein Thrombosis	<ul style="list-style-type: none"> <li>• Discuss risk factors and appropriate prophylaxis</li> <li>• Identifies risks of anticoagulation and able to discuss monitoring required for each method</li> <li>• Provides appropriate patient education on DVT treatment/prevention</li> </ul>	Acute care Interventional radiology
Pulmonary Embolism	<ul style="list-style-type: none"> <li>• Describe symptoms of PE and what testing is ordered</li> <li>• Discuss the management of PE               <ul style="list-style-type: none"> <li>- Considerations for nursing with thrombolysis</li> <li>- AC drips</li> <li>- Oxygenation goals</li> </ul> </li> </ul>	Critical care Acute care Interventional radiology
Chronic Venous Disease	<ul style="list-style-type: none"> <li>• Describe venous reflux and venous insufficiency</li> <li>• Discuss principles of management: compression, venogram (iliac stenting), venous pumps</li> </ul>	Outpatient Acute care Rehab
Stasis Ulcers	<ul style="list-style-type: none"> <li>• Discuss wound care management               <ul style="list-style-type: none"> <li>- Compression</li> <li>- Una Boot</li> <li>- Biologic dressings</li> </ul> </li> </ul>	Outpatient Acute care Rehab
Diabetic Foot Management	<ul style="list-style-type: none"> <li>• Describe why diabetes are at risk for foot infections: specifically osteomyelitis and charcot foot.</li> <li>• Discuss wound care options</li> </ul>	Outpatient Acute care Rehab
Lymphedema	<ul style="list-style-type: none"> <li>• Describe the pathophysiology of primary and secondary lymphedema</li> <li>• Discuss treatment options (exercise, compression, lymphedema pumps)</li> <li>• Demonstrate how to properly apply compression wrap to leg</li> </ul>	Outpatient Acute care Rehab
Vascular Trauma	<ul style="list-style-type: none"> <li>• Discuss what kind of trauma can be associated with vascular injury (fractures, crush injury, MVC, or endovascular procedure complications)</li> <li>• Discuss complications of vascular trauma               <ul style="list-style-type: none"> <li>- blood loss</li> <li>- thrombosis, pseudoaneurysm, fistula</li> <li>- bruising, swelling, pain</li> </ul> </li> </ul>	Acute care Rehab