

# Pulmonary Pathophysiology

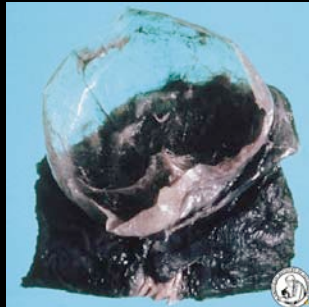
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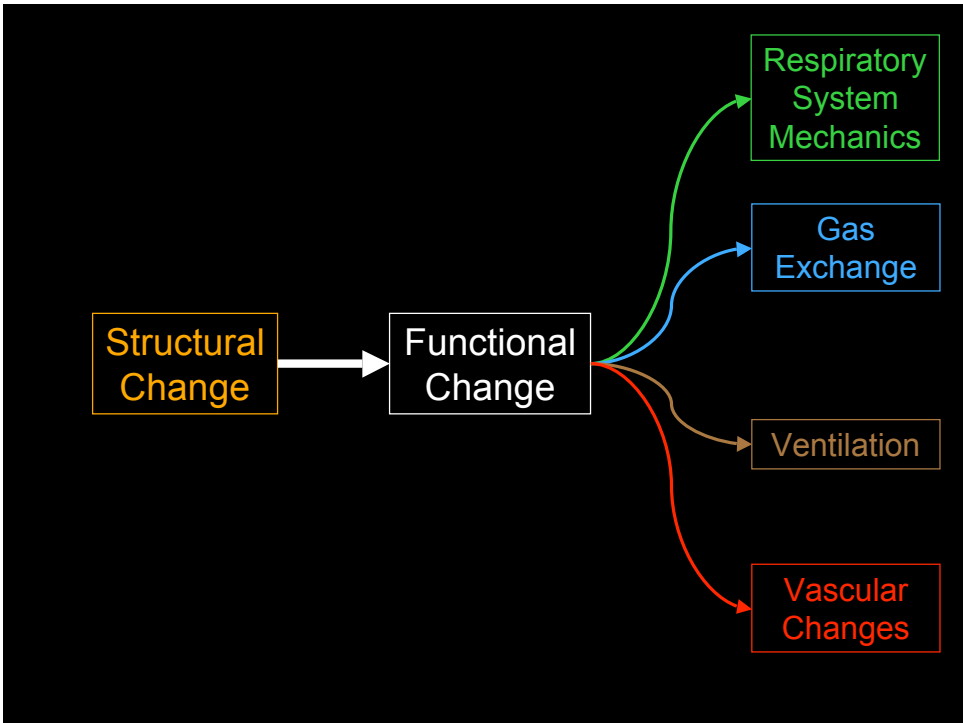
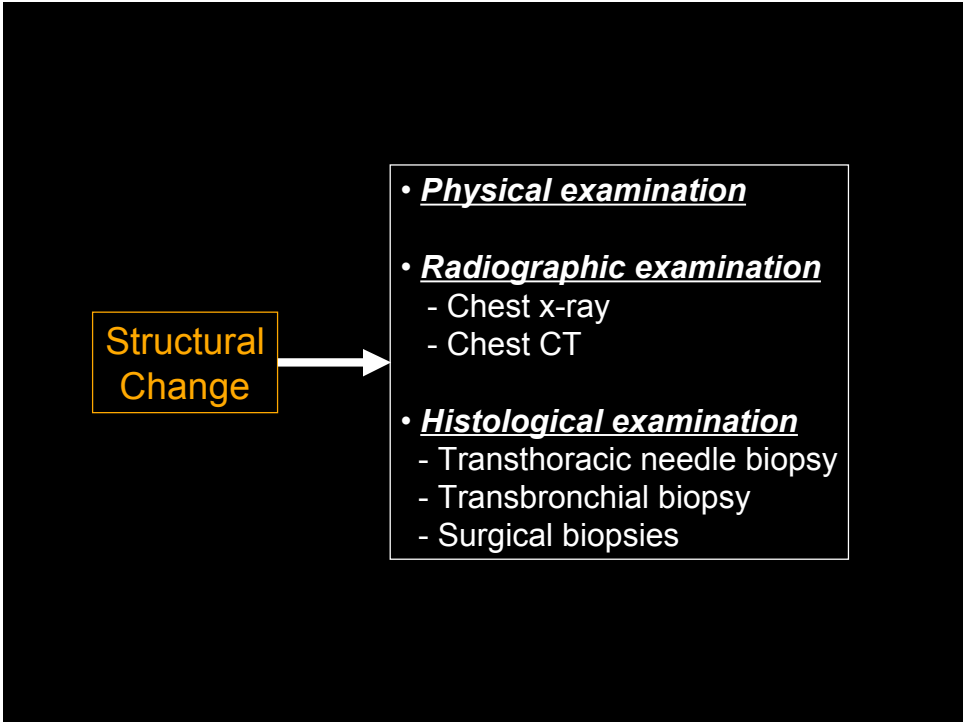
Paradigm

Causes  
of  
Disease



Structural  
Change





	<u>Pathophysiology</u>	<u>Diagnosis</u>	<u>Treatment</u>
<b>Respiratory System Mechanics</b>	<ul style="list-style-type: none"> <li>• Airway resistance</li> <li>• Lung compliance</li> <li>• Chest wall compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Physical exam</li> <li>• PFTs</li> <li>• Ventilator (!)</li> </ul>	<ul style="list-style-type: none"> <li>• Diuresis</li> <li>• Antibiotics</li> <li>• Corticosteroids</li> <li>• Bronchodilators</li> <li>• Radiotherapy</li> <li>• Transplantation</li> </ul>
<b>Gas Exchange</b>	<ul style="list-style-type: none"> <li>• V/Q mismatch</li> <li>• Right-to-left shunt</li> <li>• Diffusion</li> </ul>	<ul style="list-style-type: none"> <li>• Arterial blood gas</li> <li>• Pulse oximetry</li> <li>• Diffusion capacity</li> <li>• Shunt studies</li> </ul>	<ul style="list-style-type: none"> <li>• Oxygen</li> <li>• PEEP</li> </ul>
<b>Ventilation</b>	<ul style="list-style-type: none"> <li>• Control of breathing</li> <li>• Alveolar ventilation</li> <li>• Dead space ventilation</li> </ul>	<ul style="list-style-type: none"> <li>• Arterial blood gas</li> <li>• Polysomnography</li> </ul>	<ul style="list-style-type: none"> <li>• Ventilation <ul style="list-style-type: none"> <li>- Invasive</li> <li>- Non-invasive</li> </ul> </li> </ul>
<b>Vascular Changes</b>	<ul style="list-style-type: none"> <li>• Vascular obstruction</li> <li>• Vasculopathy</li> </ul>	<ul style="list-style-type: none"> <li>• V/Q scanning</li> <li>• Angiography</li> <li>• Right heart cath.</li> <li>• Echocardiography</li> </ul>	<ul style="list-style-type: none"> <li>• Anticoagulation</li> <li>• Vasodilators</li> </ul>

