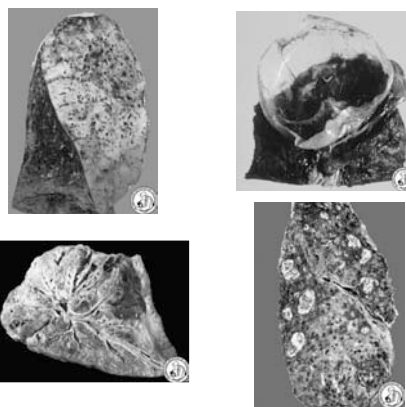
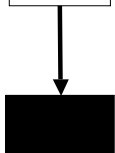



Pulmonary Pathophysiology

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Paradigm

Causes
of
Disease



- 
- ***Physical examination***
 - ***Radiographic examination***
 - Chest x-ray
 - Chest CT
 - ***Histological examination***
 - Transthoracic needle biopsy
 - Transbronchial biopsy
 - Surgical biopsies

Functional
Change

- 
- Respiratory System Mechanics
 - Gas Exchange
 - Ventilation
 - Vascular Changes

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

