

# Pulm II: Pleural Diseases Cheat Sheet

by ksellybelly via cheatography.com/19318/cs/2378/

#### **Pneumothorax**

#### Definition

The accumulation of air in the pleural space

#### **Etiology**

spontaneous (primary pneumothorax), traumatic, or iatrogenic

#### Tension PTX

Secondary to a sucking chest wound or pulmonary laceration that allows air to enter the chest with inspiration but does't allow air to leave on expiration

#### Clinical features

Acute onset ipsilateral chest pain and dyspnea, hyper resonance, diminished breath sounds, mediastinal shift to contralateral side (with tension PTX)

Treatment--severely symptomatic/large PTX

Chest tube

#### Treatment--Tension PTX

\*Medical emergency. Large bore needle insertion then chest tube following decompression

Tension PTX Buzzwords: Stab wound to chest. Hypotension, tracheal shift

Spontaneous PTX Buzzwords: Tall, skinny, male, band student, acute onset one-sided chest pain, dyspnea

#### Pleural Effusion

#### Definition

The accumulation of significant volumes of pleural fluid (25% from malignancy)

#### 1.Exudates

"Leaky capillaries" (infix, malignancy, trauma)

# 2.Transudates

"Intact capillaries", associated with increased hydrostatic or decreased oncotic pressures (CHF, atelectasis, renal disease, liver disease/cirrhosis)

## 3.Empyema

Infection within the pleural space

#### 4.Hemothorax

Bleeding into the pleural space (trauma, malignancy)

# Clinical features

Dyspnea, dull-to-flat percussion over area of fluid, mediastinum shifted away from side of large effusion (often asymptomatic though)

# Pleural Effusion (cont)

## Gold standard diagnostic

Thoracentesis: fluid sent for protein, LDH, pH, WBC w/ diff, glucose, cytology, Gram stain w/ culture/sensitivity

## Criteria to determine transudate vs. exudate

Light's Criteria (fluid is exudate if any apply)

# Light's Criteria (cont'd)

1) Pleural fluid protein to serum protein ration	>0.5	Exudative
2) Pleural fluid LDH to serum LDH	>0.6	Exudative

Exudative

3) Pleural fluid LDH > upper 2/3 of normal serum LDH