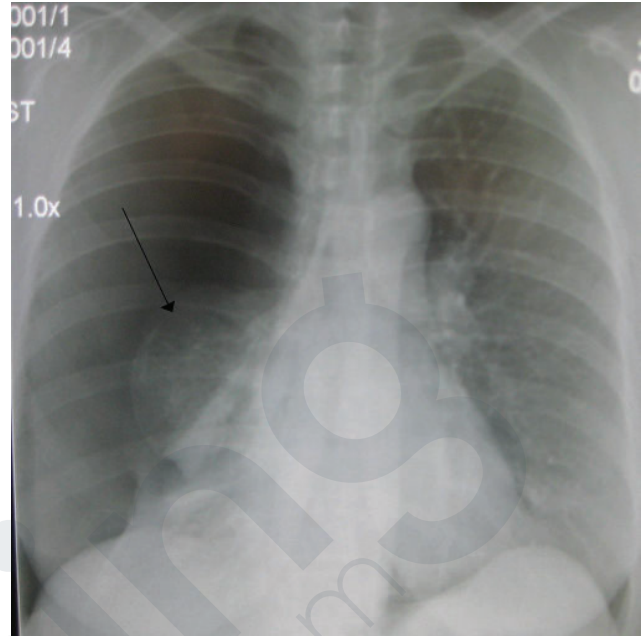


PNEUMOTHORAX PATHOCHART

PATHOPHYSIOLOGY

A general definition is the presence of air or gas in the pleural space. This then causes subsequent lung collapse. There are two types of pneumothorax, spontaneous and tension. A spontaneous pneumothorax is ruptured bleb on lung surface fills pleural space compressing lung (collapsed lung). Spontaneous pneumothoraces are further divided into primary and secondary. Primary is a rupture of bleb in otherwise healthy individual. Secondary is a rupture of distended alveoli may occur with COPD. A tension pneumothorax is an injury to chest wall leading to shift in mediastinum to unaffected side and disruption of venous return to the heart. This is a medical emergency due to severely compromised cardiac output and building pressure in chest cavity.



ASSESSMENT FINDINGS

- Pleuritic pain, hyperresonance on percussion, diminished or even absent breath sounds on the affected side, tracheal deviation to the unaffected side.

DIAGNOSTICS

- Chest x-ray
- ABG
- Thoracentesis

NURSING PRIORITIES

- Promote sufficient gas exchange
- Optimize cardiac output
- Ensure effective breathing pattern

THERAPEUTIC MANAGEMENT

- Closely monitor respiratory status and vital signs
- Assist with chest tube insertion
- Maintain chest tube and monitor chest tube drainage
- Prepare for thoracentesis
- Place patient in High-Fowler's position
- Cover an open pneumothorax due to an open (sucking) chest wound
- The hole should be covered immediately with a nonporous (occlusive) dressing sealed on three sides.
- This prevents air from entering during inhalation while allowing it to escape during expiration.

MEDICATION THERAPY

- Antianxiety meds
- Analgesics