

Pneumothorax



DEFINITION

Pneumothorax is an abnormal accumulation of air in the pleural cavity. Although rare in domestic carnivores, it can be a life-threatening emergency requiring prompt management.

CAUSES OF PNEUMOTHORAX

1. Traumatic Pneumothorax

- **Blunt:** Alveolar rupture due to a sudden increase in intrathoracic pressure
- **Penetrating:** Air entry through a thoracic breach

2. Iatrogenic Pneumothorax

Complication during medical procedures such as : (Thoracocentesis, Pulmonary puncture, Traumatic intubation, Excessive ventilatory pressure (barotrauma))

! 3. Spontaneous Pneumothorax

- **Primary (rare in dogs):** Rupture of subpleural bullae (blebs).
- **Secondary:** Related to underlying pulmonary diseases : (Pulmonary tumors, Severe pneumonias, Pulmonary thromboembolism, Lobar emphysema)

DIAGNOSIS :

- **Thoracic POCUS ultrasound:** Search for the "sliding sign" (absence of pleural sliding = pneumothorax).
- **Thoracic radiographs:** Presence of free air in the pleural space and displacement of the heart.

CLINICAL SIGNS

- Tachypnea, dyspnea, cough
- Decreased or absent respiratory sounds
- Pale mucous membranes in cases of tension pneumothorax
- Pain on thoracic palpation

TREATMENT



1. Patient Stabilization

- Administration of oxygen
- Emergency thoracocentesis (pleural puncture) to evacuate free air
- Analgesia if necessary

2. Medical Management

- For low-volume pneumothorax: intermittent thoracocentesis
- Placement of a thoracic drain if air accumulation persists

3. Surgical Management

- Indicated in cases of spontaneous or recurrent pneumothorax, particularly in dogs.
- Surgical exploration and resection of pulmonary bullae or affected lobes.