COMMON THORACIC DISEASES

DECISION TREE

STABILIZATION

Oxygenation, Hemodynamic Stabilization, +/- Fluid Therapy, +/- Sedation, +/ Endotracheal Intubation

DIAGNOSTICS

Thoracic radiographs, POCUS, +/- Computed Tomography, +/- Thoracocentesis

DIAPHRAGMATIC HERNIA

ANALGESIA - SURGERY - POEST-OPERATIVE CARE

Congenital or traumatic in origin; acute or chronic in nature. Gastric herniation and refractory respiratory distress are surgical emergencies. Prognosis is excellent 12-24 hours post-operatively.

PLEURAL EFFUSIONS

Chylothorax
Hemothorax
Hydrothorax
Neoplastic effusions

OXYGEN, THORACOCENTESIS, +/- THORACOSTOMY TUBE - MINIMIZED HANDLING,+/- ANTIMICROBIAL THERAPY, +/- BRONCHODILATOR THERAPY

Provide supplemental oxygen via least stressful method. Perform thoracic POCUS to confirm pleural effusion. Maintain patient in quiet environment and minimize handling. Provide sedation (e.g., butorphanol). Perform thoracocentesis and subsequent testing on pleural fluid (cytology, fluid analysis, cholesterol, culture). Measure blood pressure. Pursue comprehensive thoracic imaging (e.g.: radiography, computed tomography) once patient is stabilized. Provide bronchodilator (e.g, albuterol inhaler, terbutaline) PRN. Place thoracotomy tube if repeated thoracocenteses are needed. Provide appropriate antimicrobial therapy if infectious etiology is determined.

PNEUMOTHORAX

Spontaneous
Traumatic

ANALGESIA - THORACOCENTESIS +/- THORACOSTOMY TUBE

Multiple etiologies. Perform thoracocentesis and consider thoracostomy tube for recurrent pneumothorax. Spontaneous pneumothorax may require surgical intervention or blood pleurodesis.

FELINE ASTHMA

OXYGEN, MINIMIZE HANDLING, SEDATION, BRONCHODILATOR, ANTI-INFLAMMATORY CORTICOSTEROID

Provide supplemental oxygen via least stressful method. Maintain patient in quiet environment and minimize handling. Pursue thoracic POCUS / radiography once patient is stabilized. Provide sedation (e.g., butorphanol). Provide bronchodilator (e.g, albuterol inhaler, terbutaline). Provide anti-inflammatory corticosteroid (e.g., dexamethasone 0.07-0.14 mg/kg IV; fluticasone inhaler 44-220 mcg q12 hr)

PNEUMONIA

OXYGEN, MINIMIZED HANDLING, ANTIMICROBIAL THERAPY, +/- BRONCHODILATOR THERAPY

May be aspiration, bacterial, fungal, parasitic, or eosinophilic in origin. Provide supplemental oxygen via least stressful method. Maintain patient in quiet environment and minimize handling. Pursue thoracic POCUS / radiography once patient is stabilized. Measure blood pressure. Pursue airway sampling (e.g., bronchoalveolar lavage) if patient is stable. Provide sedation (e.g., butorphanol) if needed. Provide bronchodilator (e.g, albuterol inhaler, terbutaline) PRN. Antimicrobial therapy is ideally based on culture/sensitivity data and minimally based on most likely infective organism(s).

EDEMA

OXYGEN, MINIMIZED HANDLING, DIURETIC THERAPY, +/- BRONCHODILATOR THERAPY, +/- CARDIPROTECTIVE MEDICATIONS

May be cardiogenic or non-cardiogenic (e.g., seizure, upper airway obstruction, ALI/ARDS) in nature. Measure blood pressure. Provide supplemental oxygen via least stressful method. Maintain patient in quiet environment and minimize handling. Provide sedation (e.g., butorphanol). Pursue comprehensive thoracic radiography once patient is stabilized. Provide diuretic therapy (e.g., furosemide). Provide bronchodilator (e.g, albuterol inhaler, terbutaline) PRN. Provide pimobendan +/- ACE-I +/- spironolactone if edema is cariogenic.

THORACIC MASSES

Cranial Mediastinum
Heart base
Lymph node
Pulmonary parenchyma
Thymus

OXYGEN, MINIMIZED HANDLING, ANTIMICROBIAL THERAPY, +/- BRONCHODILATOR THERAPY

Provide supplemental oxygen via least stressful method. Maintain patient in quiet environment and minimize handling. Provide sedation (e.g., butorphanol). Pursue comprehensive thoracic imaging (e.g.: radiography, computed tomography) once patient is stabilized. Provide bronchodilator (e.g, albuterol inhaler, terbutaline) PRN. Pursue appropriate airway/lung sampling (e.g., bronchoalveolar lavage, ultrasound-guided fine needle aspiration) once patient is stable. Pursue adjuvant chemotherapy once definitive diagnosis is made.

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