

Thoracic Radiology Checklist

Case, MRN or Accession Number: _____

Technique		Repeat Films	OK
1.	Images: LLAT: ___; RLAT: ___; VD: ___; DV: ___; Special Views: _____		
2.	Age of patient? ___ years old.		

	Technique	Repeat Films	OK
3.	Positioning	_____	_____
4.	Technical (Anatomy included)	_____	_____
5.	Inspiration (Yes or No; If no - repeat)	_____	_____

Interpretation Paradigm	NORMAL	ABNORMAL (roentgen sign)
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A. Extrathoracic structures:

a. Thoracic Limb	_____	_____
b. Cervical Spine and Soft Tissues	_____	_____
c. Thoracic Spine	_____	_____
d. Ribs and sternum	_____	_____
e. Diaphragm	_____	_____
f. Cranial Abdomen	_____	_____
g. Thoracic Wall	_____	_____

B. Pleural Space

a. Pleural Fissure Lines?	_____	_____
b. Pneumothorax	_____	_____
c. Pleural Effusion	_____	_____
d. Pleural Mass	_____	_____
e. Extrapleural Sign Present?	_____	_____
f. Diaphragmatic Rupture?	_____	_____

C. Pulmonary Parenchyma

a. Decreased Opacity?	_____	_____
i. IF YES, Focal? Lobar?	_____	_____
ii. IF YES, Diffuse?	_____	_____
iii. IF DIFFUSE, Pulmonary vessels?	_____	_____
b. Increased Opacity?	_____	_____
c. IF YES, then:		
i. Focal (single lobe) _____; Multifocal _____ (multiple lobes but not all); Generalized _____		

- ii. Location (anatomic lobes and position in the lobe and in general?)
 - 1. In general? _____ cranioventral (pneumonia), _____ Caudodorsal (edema)
 - 2. Lung lobes involved and position in the lobe [hilar, mid-zone or peripheral]

- iii. Mediastinal Shift Present (assumes VD/DV is straight)?
 - 1. If YES, Ipsilateral? _____
 - 2. Contralateral? _____

- iv. Pulmonary Pattern Present (caveat: can be multiple patterns present; the patterns are presented in order for looking up differentials; different patterns represent different degrees of severity of the same disease)
 - 1. Mass present? (solitary, big (> 3 cm), soft tissue opaque or Cavitated and round?)
 - a. Lobe involved? _____
 - 2. Alveolar pulmonary pattern? (3 out 5 to call it!)
 - a. Air Bronchograms? Yes ___ OR No ___
 - b. Uniform soft tissue gray? Yes ___ OR No ___
 - c. Border effacement of small vessels in affected area? Yes ___ OR No ___
 - d. Border effacement of cardiac silhouette or diaphragm? Yes ___ OR No ___
 - e. Lobar Sign Present? Yes ___ OR No ___
 - 3. Bronchial pulmonary pattern? Presence of rings and lines – look in periphery
 - a. Generalized? Yes ___ OR No ___
 - b. Focal? _____ Lobar? _____ Bronchiectasis? _____
 - 4. Vascular Pulmonary Pattern?
 - a. Pulmonary veins enlarged? Yes ___ OR No ___ (left heart failure)
 - b. Pulmonary arteries enlarged? Yes ___ OR No ___ (heartworm disease)
 - c. Both Pulmonary Arteries and Veins Enlarged? Yes ___ OR No ___ (Cats in heart failure or fluid overload)
 - 5. Structured Interstitial?
 - a. Nodules – variable sizes, soft tissue opacity and random distribution? Yes ___ OR No ___?
 - b. Miliary – “Millet seed”; small nodules in peripheral lung fields (thin sections of the lung)? Yes ___ OR No ___?
 - 6. Unstructured Interstitial – BACK DOOR DIAGNOSIS? Yes ___ OR No ___? Be sure the films are not expiratory. Never Mild!!
 - 7. Severity? Moderate _____ Severe _____

D. Mediastinum

a. Cranial Mediastinum

- i. Pneumomediastinum present? ____
- ii. Dilated esophagus? ____
- iii. Widened mediastinum on VD? ____
- iv. Cranial mediastinal mass? ____ IF YES, Mass position: Ventral ____ or Dorsal ____
- v. Deviation of the trachea? Yes ___ OR No ____; If yes, which direction? Ventral ____; Lateral ____ (VD - to which side?); Dorsal ____
- vi. Sternal Lymph Node Enlargement? Yes ___ OR No ____

b. Middle Mediastinum

i. Cardiac Silhouette Paradigm

1. Heart -

- a. Normal ____; Large (Cardiomegaly?) ____; OR Small ____; *If LARGE, then:*
- b. Left Sided? ____; dorsal elevation of the trachea? ____
- c. Right Sided? ____ (VD radiograph - reverse "D")
- d. Generalized (round or globoid)? dorsal elevation of the trachea? ____
- e. Biatrial Enlargement (Cat)? ____; Valentine shape cardiac silhouette on the VD image of the cat? ____

2. Pulmonary circulation

- a. Normal? ____
- b. Pulmonary artery enlarged? ____; Tortuous? ____; Blunted? ____
- c. Pulmonary veins enlarged? ____; More than right cranial lobar vein on left lateral radiographic image? ____
- d. Overcirculation? ____; (pulmonary arteries and veins enlarged)
 - i. Generalized? ____; Lobar? ____
- e. Undercirculation? ____; (small pulmonary arteries and veins)
 - i. Generalized? ____; Lobar Oligemia? ____

3. Great Vessel Enlargement?

- a. Aorta? ____; Presence of ductus diverticulum (Left fourth ICS)? ____
- b. Main Pulmonary Artery? ____
- c. Caudal Vena Cava? ____ (>2 x descending thoracic aorta diameter on both laterals)
- d. Aortic Knob (redundant aorta) (Cat)? ____ (VD projection)

4. Other considerations for Generalized Cardiomegaly; Do you believe there is....?

- a. Pericardial Effusion? ____
- b. DiCM? ____
- c. MV/TV disease in combination? ____
- d. PPDH? ____ (differential opacities in the cardiac silhouette)

5. Presence of Heart Failure?
 - a. Left Heart Failure (pulmonary edema)? ___
 - b. Right Heart Failure (Pleural Effusion)? ___
6. Other cardiac abnormal roentgen signs?

7. Do the cardiac abnormalities that I am seeing make sense in combination with each other (all from section b(i))? ___ YES OR NO ___ (then rethink it!!)
- ii. Tracheobronchial lymph node enlargement? Yes ___ OR No ___
 1. Central LN? ___
 2. Right LN? ___
 3. Left LN? ___
- iii. Deviation of the trachea? Yes ___ OR No ___
 1. Dorsal? ___ (Left atrium)
 2. Ventral? ___ (esophageal or central TB LN enlargement)
 3. Remember central pulmonary masses could push the trachea in either direction, but this is rare.
- iv. Esophageal mass, FB or dilation? Yes ___ OR No ___
 1. If yes, then which of above? _____
- c. Caudal Mediastinum
 - i. Esophageal abnormality?
 1. Dilation? ___
 2. Fluid distended? ___
 3. FB or Mass? ___
 4. Hiatal Hernia? ___. Positional? ___; Single image only? _____
 - ii. Other caudal mediastinal abnormalities?
 1. Pneumomediastinum? ___
 2. Mass? ___
 3. Fluid? ___
 - iii. Caudal Vena Cava Visualized? Yes ___ OR No ___?
 1. Congenital absence (rare)? ___
 2. Accessory lung lobe mass or pulmonary pattern border effacement? ___

Summary Sentence(s) (Should not repeat findings)

1.

- 2.
- 3.
- 4.
- 5.
- 6.

Can you tie all of these together as one disease process (particularly *important* to think through pathophysiology if *multicompartment* disease; needs to be a known disease – specific name – that occurs in the dog or cat)

DDX or DX?

- 1.
- 2.
- 3.
- 4.
- 5.

Next Step (how to get at final answer without necropsy)?

- 1.
- 2.
- 3.
- 4.
- 5.