# Signalment:

Species: Canine Breed: English Bulldog Sex: Spayed Female Age: 3.5 years old

# Presenting complaint:

- diagnosed with a left sided basilar systolic heart murmur
- presented to rDVM with a two day history of polydypsia and anorexia.
- shaking episodes lasting 2-3 minutes and followed by a period of lethargy
- pale mucous membranes and dyspneic.
- Fluid pockets on ventrum

# **Physical Examination**

- Dyspnea
- Systolic blood pressure 60mmHg
- oxygen saturation 65%
- Fluid pockets on ventrum and distal extremities

# Hematology

CBC

- Neutrophilia
- Lymphopenia
- Monocytosis

# CHEMISTRY

- Hyponatremia
- Hyperglycemia
- Azotemia

# **BLOOD GAS**

- Metabolic acidosis
- Decreased oxygen saturation percentage

## What are your initial radiographic impressions?



DV: Thorax



Right Lateral: Thorax

# Radiographic impressions:

Multiple pleural fissure lines are seen. The lung margins are separated from the thoracic wall by fluid opacity and there is rounding of the costophrenic angles. There is border effacement of the heart and ventral diaphragm. Overall there is an increase in pulmonary opacity cranially and at the hilus. There is dorsal displacement of the trachea and hilus. There are air bronchograms in the right and left cranial lung fields and at the perihilar region. There is a small amount of gas in the caudal cervical and cranial thoracic esophagus. In the limited view of the abdomen there is a severe loss of serosal detail and a pendulous abdominal contour

Radiographic findings are consistent with a pleural and peritoneal effusion. Differentials include transudate, hemorrhage or exudates.

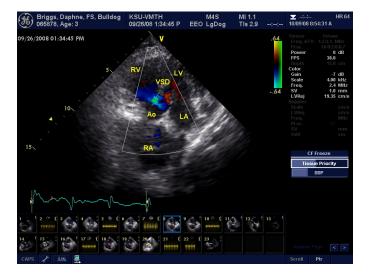
# ADDITIONAL IMAGES



Echo Image I



Echo Image 2



# Echo Impressions:

Echo Image 1: The right ventricle is hypertrophied. The lumen of the pulmonary valve is narrowed and there is decreased blood flow into the right pulmonary outflow tract.

Echo Image 2: The continuous wave Doppler study indicates a maximum blood flow velocity of 4 meters/second. The velocity in this location of a healthy heart is 1 meter/second.

Echo Image 3: Blood is moving from the right ventricle through a defect in the ventricular septum into the left ventricle. This is classified as a non-restrictive ventricular septal defect.

# **Necropsy Findings:**

<u>Tetralogy of Fallot</u>: Pulmonic Stenosis, Right Ventricular hypertrophy, Overriding aorta, and Ventricular septal defect