



**Unit : Traumatic Reticulo Peritonitis and Pericarditis**  
**Lesson : 4**

# How to Diagnose it?

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# Introduction

- Grunt and grunting and bruxism cattle suggest
- Slope test
- Wither pinch
- Pole test
- Painful percussion on the reticulum with a rubber hammer

# Ancillary Diagnostics

- Elevated WBC count with neutrophilia
- **Acute local peritonitis** - Regenerative left shift (mature neutrophils  $>4000$  cells/ $\mu$ L)
- **Acute diffuse peritonitis** - Degenerative left shift (total count  $<4000$  cells/ $\mu$ L)
- **Chronic cases** - Moderate leukocytosis, neutrophilia with monocytosis

## Cont...

- Hyperfibrinogenemia in acute cases
- Increased total protein **>10.5 g /dL** is suggestive
- Higher fibrinogen, Haptoglobin & SAA concent in TRP
- Cardiac troponin-I (cTn-I) and cardiac troponin-T increased
- cTn-I concentrations ranged from 0.39 to 7.74 ng/ml in the TRP cases

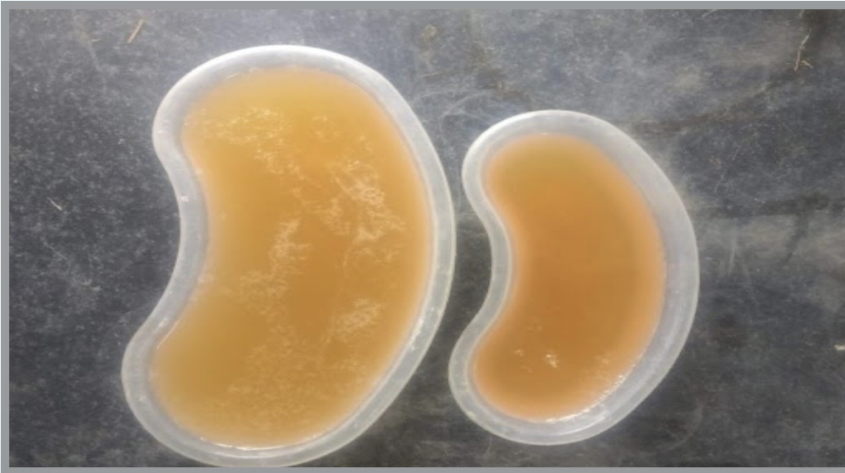
# Commercial Fibrinogen & cTn-T kits



# Abdominocentesis

- Peritoneal fluid analysis can help in chronic cases
- Total nucleated cells > 6000 cells/ $\mu$ l
- Total protein is > 3 g/dL
- Neutrophils > 40% & eosinophils < 10%
- Failure to obtain fluid does not rule out peritonitis

# Fibropurulent peritoneal fluid



# Pericardiocentesis

- Done at greatest audibility of heart
- Fourth or fifth intercostal space of left side
- Arrhythmia may occur
- Spreading the infection to pleural cavity
- Tube centesis may followed



# Metal Detection

- Metal detectors are of limited use
- Positive for metal over the reticular area
- Do not distinguish perforating and nonperforating
- Non-invasive, fast and cheap test

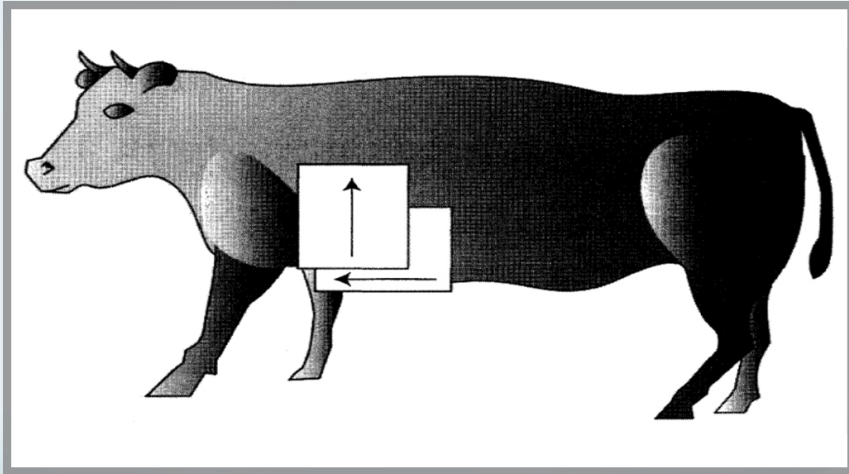
# Ferroscopy



# Radiography

- Cranial abdominal X-ray is useful
- Identifies metallic FB at least 1 cm long & greater than 30 °
- Also been used to determine the success or failure of magnet use
- Radiographs not for identifying peri-reticular/hepatic abscess secondary to TRP

# Radiography locations



# Radiographic Foreign body



# Ultrasound

- Presence of anechoic peritoneal, pleural and pericardial fluid
- with hyperechoic fibrinous or suppurative materials
- Gap b/w abdominal wall & reticulum
- Detect abnormal motility associated with
  - Perireticular adhesions
  - Perireticular abscessation
  - Peritoneal, thoracic & pericardial effusion

# Postmortem Exam

- Extensive fibrinous adhesions
- Multiple abscesses on either side
- Large quantities of turbid, foul-smelling peritoneal fluid that contained fibrinous clots
- Accumulation of pus b/w pericardium

# Fibropurulent Pericarditis







*Thank  
you*