Veterinary Science
Preparatory Training for the Veterinary Assistant
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Post-Mortem Examinations

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Objectives

- Define necropsy
- Discuss the importance of post-mortem examinations to veterinarians
- Discuss the process of site selection for post-mortems
- Describe the conditions that a veterinarian usually looks for in post-mortem examinations
Definition

Necropsy

- An autopsy performed on an animal
- An examination of the body after death usually with such dissection as will expose the vital organs for determining the cause of death or the character and extent of changes produced by disease
- An examination of a dead body
  - Post-mortem is after death
Decomposition (autolysis)
  - Warm temperature

Delayed examination
  - Freeze
  - Refrigerate
- History
  - Age
  - Owner
  - Husbandry
    - Housing
    - Diet
  - Reproductive activity
  - Medical history
    - Illness
    - Treatment
    - Vaccinations
  - Current health issues
- Death information
  - When died
  - Refrigerated or frozen
  - Behavior prior to death
  - Clinical observations
    - Staggering
    - Lethargic
    - Diarrhea
    - Wheezing

- Contributing factors
  - Environment
    - Weather conditions
    - Feed and water
    - Associated animals
    - Associated plants
Site Selection

- Small animals
  - Change location
  - Well-ventilated room

- Large animals
  - Site of death
    - Avoid contamination of environment
  - Site easily disinfected
  - Use straw under animal
  - Bury or burn carcass
- Preparation
  - Proper clothing
    - Coveralls
    - Rubber gloves
    - Shoe covers/rubber boots
Instruments

- Scissors
- Forceps
- Probes
- Loppers
- Knives
  - Straight pointed blade
  - Curved skinning blade
- Bone saw
Cleanliness
- Sanitize all instruments and clothing
- Disinfect or decontaminate necropsy field

Records
- Keep complete records
Abnormal Conditions

- Abscess
  - A lesion containing matter or pus
Arthritis

Inflammation in a joint
- Atrophy
  - Wasting of tissue
**Calculi (calculus)**

- Hard, pebble-like mineral formations in various parts of the body
■ Congestion
  ■ Increase amount of blood in blood vessels
Cystitis
- An inflammation of the bladder
Dermatitis

A skin inflammation or disorder
Dysentery

- Severe diarrhea usually accompanied by blood and mucous
Edema

- Swelling due to excess fluids in a body part
- Emphysema
- A lung filled with air
Inflammation

- Abnormal changes in the tissue usually accompanied by redness and swelling
- Enteritis
  - Intestinal inflammation
- Gastroenteritis
  - Inflamed stomach and intestines
Gangrene

- Death and decomposition of tissue
Hemorrhage

- Free blood in tissues or body cavity
Hepatitis

Liver inflammation
Hypertrophy

Increased size of an organ
Tumor

An abnormal growth
Malignant tumor

- Tumor that forms secondary growths
Mastitis

- Udder inflammation
Necrosis
- Death of tissue
Nephritis
- Kidney inflammation
Parasitism
- Presence of parasites
Performing a Necropsy

- Cut and lay back front and rear legs
- Remove “pluck” (tongue, trachea, lungs, heart)
- Cut from top of chest to groin
- Routine exam of organs
  1. Tongue, hard and soft palates, pharynx
  2. Open esophagus
3. Open larynx and trachea
4. Examine thyroids, parathyroids and thymus
5. Leave heart and lungs in tack

1. Heart
   1. Observe size and shape
   2. Pericardial surfaces
   3. Open heart

2. Lungs
   1. Color
   2. Consistency
   3. Weight
   4. Contents
   5. Airways
6. Lymph nodes in respiratory system
7. Open stomach
8. Straighten intestine
   1. Observe mucosa
   2. Open segments
   3. Observe pancreas
   4. Observe lymph nodes
9. Observe liver
   1. Palpation
   2. Visual
   3. Make cuts
10. Observe spleen
   1. Palpation
   2. Visual
   3. Make cuts
11. Kidneys
   1. Surface
   2. Size
   3. Shape
   4. Color
   5. Make cuts
   6. Ureters
12. Open and examine bladder
13. Open and examine anus
14. Open vagina and uterus (if present).
Collecting Samples

- Blood
- Heart
- Lung
- Spleen
- Liver
- Kidney
- Stomach
- GI contents
  - Stomach
  - Colon
When collecting samples
- Collect in proper solutions
- Store appropriately
- Label, label, label
http://video.vet.cornell.edu/virtualvet/bovine/chapters1-4.html