Chapter 8 - Lesson 4

Post-Mortem Examinations

Introduction

Necropsy, or post-mortem examination, is an important tool for the veterinarian. It is a valuable part of diagnosis that is necessary for effective control of animal diseases and will usually answer the question, “Why did the animal die?” Conducting and recording post-mortem examinations will also give the veterinarian valuable experience and information that may aid future cases.

Perform all post-mortem examinations as soon as possible after death. The speed of post-mortem decomposition varies with different parts of the body and is especially affected by temperature.

Site Selection for Post-Mortems

When selecting a place for a post-mortem examination, consider convenience, sanitation, and disposal of the carcass. Small, easily transported animals may be “posted” in a well-ventilated room in the clinic. Since this is not feasible with large animals, consider the following precautions:

1. Avoid contamination of ground, quarters, or livestock food.
2. If possible, choose an area that can be readily disinfected.
3. If the above two precautions cannot be followed, place the body on straw to absorb the fluids, then burn or bury the straw.
4. If hauling the carcass to a rendering plant, it should be accessible to the truck.
5. If it is to remain at the site of post-mortem, properly and completely bury or burn the carcass.

Post-Mortem Preparation

For safety, the veterinarian and assistant must wear suitable clothing while preforming post-mortem examinations. One-piece coveralls, rubber gloves, and rubber overshoes that can be disinfected after each use are recommended.

In addition to surgical instruments, such as scissors, forceps, and probes, other instruments for “posting” should include: two sharp knives, one with a straight, pointed blade and one with a curved skinning blade; a saw for cutting bone; bone chisels; and a carpenter wrecking bar for prying bones apart. Clean and disinfect, or sterilize, all clothing and instruments after each use.

Make and file complete records on each post-mortem examination for doctor-client relationships, research, disputes, and complications that might arise.

Post-Mortem Procedure

The veterinary assistant must observe and pay attention to the veterinarian, particularly in selecting and preparing specimens for laboratory examination. This will enable the assistant to develop the knowledge and skills necessary to assist properly and efficiently.

Familiarity with the following conditions assists the veterinarian in analyzing and evaluating post-mortem examinations:
1. Abscess - A lesion containing matter or pus.
2. Arthritis - Inflammation in a joint.
3. Atrophy - Wasting of tissues.
4. Calculi - Hard, pebble-like formations in various parts of the body.
5. Congestion - Increased amount of blood in blood vessels.
7. Dermatitis - A skin inflammation or disorder.
8. Dysentery - Severe diarrhea usually accompanied by blood.
9. Edema - Swelling due to excess fluids in a body part.
10. Emphysema - A lung filled with air.
11. Enteritis - An intestinal inflammation.
12. Gangrene - Death and decomposition of tissue.
15. Hemorrhage - Free blood in tissues or body cavities.
17. Hypertrophy - Increased size of an organ.
18. Inflammation - Abnormal changes in a tissue usually accompanied by redness and swelling.
19. Malignant tumor - Tumor that forms secondary growths.
20. Mastitis - Udder inflammation.
21. Melanosis - A black coloring or pigmentation.
22. Necrosis - Death of a part or tissue.

Reference


Questions

1. What is necropsy? Why is it important to the veterinarian?
2. List three factors that should be considered when selecting a post-mortem site.
3. Describe the clothing that the veterinarian and the veterinary assistant should wear when performing a post-mortem.
4. List four “posting” instruments and describe the purpose of each.

Activity

1. Observe a post-mortem examination of an animal by a veterinarian.
   a. List the organs and tissues that were observed to be abnormal.
   b. Preparation of samples for laboratory examinations.
   c. Describe the procedure used to properly dispose of the carcass.
   d. Describe the procedures used to properly clean the clothing and instruments used.
   e. Was a diagnosis made by gross examinations, laboratory tests, or a combination of both?