

The Five Minute Postmortem — A Simple Approach to Field Diagnosis

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Performing a thorough postmortem in the field requires following some methodical approach, ensuring that no organ system or portion of the animal is left unexamined. Few instruments or tools are required to perform a necropsy (Table 1) and the procedure should be complete in 10 - 15 minutes.

Table 1. Necropsy Equipment

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|---------------|-------------------|
| Axe | Buffered formalin |
| Knife | Heavy gloves |
| Steel | OB suit |
| Formalin cups | Strong back |

Identification of the animal and noting any abnormal findings on the external carcass is the first observation one should make. By entering the carcass on the right side the rumen can be avoided. Any abnormal findings including epistaxis, diarrhea, hyperemic conjunctiva, excessive salivation, etc, should be duly noted. External orifices including the mouth and tongue should be examined at this time. To open the carcass, a ventral midline incision using a sharp knife should be made from the jaw extending caudally to the rectum. Note that rendering companies become reluctant to pick up carcasses if the hide is excessively damaged. Using the forelimbs for leverage, the skin from the neck to the mid thoracic and abdominal region should be reflected toward the dorsal part of the carcass. Continuing caudally, the hind limb should be used for leverage allowing exposure of the coxofemoral joint. Once exposed, it can be excised thereby releasing the limb from the carcass and allowing it also to be reflected dorsally.

Using the axe, the rib cage may be removed by making precise incisions in the sternum cartilage and following a line along the dorsal attachment of the ribs to the spinal

cord. After cutting the diaphragm with the knife, the rib cage can be easily removed exposing the thoracic cavity. The abdominal body wall and all major body systems are now exposed for examination. It is important at this point to systematically examine the carcass internally. Initially, the "pluck" should be removed. This includes the larynx, esophagus, trachea, lung, heart, pericardial sac and associated lymph nodes. Each of these may be individually examined. Moving caudally, the following organs and organ systems are examined:

1. Liver and posterior vena cava
2. Forestomachs
3. Intestinal tract
4. Kidney and Urogenital system
5. Musculoskeletal system including joints

The brain can be easily removed by removing the top of the cranium using the axe. An imaginary line is drawn from the occipital area over the orbit of the eye, extending toward the nares. If reasonable care is taken with the axe, following this line will allow removal of the cranium without damaging the brain and brainstem. Care should be taken not to cut too deeply with the axe, but rather just loosen the cranium. It can then be easily peeled off.

In conclusion, the field postmortem is relatively simple and does not require much time to complete. If a comprehensive postmortem is done, a tentative diagnosis can be made in the majority of cases. A common mistake veterinarians make is to not completely open the carcass but rather take the "window" approach and only peer into the carcass where they feel pathology may exist. As one of our esteemed university professors has remarked: "Practicing veterinarians will make far more mistakes in an examination by not looking than not knowing".

Bovine Spongiform Encephalopathy in the UK: An Update

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Bovine Spongiform Encephalopathy, BSE, was first diagnosed in England in November 1986. It is a slow disease and the incubation period varies between two and

five years, and so mainly affects cows. It is suspected that the disease is caused by a Scrapie like virus. As with other spongiform encephalopathies, the outcome is invariably