

AHL LabNote Number 42

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Field and clinic postmortems: Simplified protocol and image list

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Digital images captured during postmortem (PM) examinations provide a permanent record of lesions. The images are a very useful communication tool when consulting with pathologists and other specialists. PM images provide valuable supplemental information for pathologists evaluating tissue samples submitted to a diagnostic laboratory for histologic examination. Images may be emailed to AHL pathologists at <u>ahlpath@uoguelph.ca</u>

The image list below provides both a step-wise guide to the postmortem procedure and a suggested set of images that are applicable to *all species* of companion and food-producing animals. Establishing and following a standard routine for PM procedures is important. This allows the practitioner to spend more time identifying and interpreting lesions, rather than concentrating on the logistics of the exam. Developing a PM routine is similar to having a routine protocol for physical examination in a live patient.

Remove ear tag or create ID label, and include with <u>all</u> photos.





Image 1. External views: full body, head, thorax/abdomen, perineum

- For unexpected deaths, take image *in situ*, in location and position where body was discovered.
- Include views the depict body condition, hydration (eyes), evidence of predation or trauma, etc.

Open abdominal and thoracic cavities.



<u>Image 2/3</u>.Opened thorax (with organs in situ). Heart *in situ*, with pericardial sac opened (check for fluid, exudate, etc).

Remove pluck.



<u>Image 4.</u>Pluck, with focus on lungs (dorsoventral view, with right and left lung visible).



Image 5. Cross-section of right and left lung.



<u>Image 6</u>.Cross-section of heart through both ventricles.



<u>Image 7.</u> Larynx (including thyroid glands) and trachea: opened and mucosal surface exposed



Image 8. Opened abdomen (with organs in situ)



<u>Image 9.</u>Opened abdomen with intestines fanned out.

In ruminants, remove omentum. In all species, fan out intestines and locate cecum and ileum.



<u>Image 10</u>.Open cecum, ileum, and jejunum to expose mucosal surface.



Image 11. Open colon to expose mucosal surface.



<u>Image 12.</u>Open duodenum to expose mucosal surface.



<u>Image 13</u>.Liver – capsular surface. For ruminants, include opened caudal vena cava.



Image 14.Liver – cross section.



Image 16. Ruminants: rumen – serosal surface.



Image 18. Kidney: sagittal sections, with cut surfaces exposed.



<u>Image 15</u>.Abomasum/stomach – serosal and mucosal surface



<u>Image 17</u>.Ruminants: rumen – mucosal surface and content.



Image 19. Spleen: capsular surface and cross section.





Image 20. Adrenal gland: cross section.

Image 21.Brain.

Unexpected death / neurologic cases: Remove brain. Also remove spinal cord if required, based on clinical signs.

For details, see LabNote 33:

https://www.uoguelph.ca/ahl/content/ahl-labnote-33-brain-removal-field-postmortems