



Pathology Biology Section – 2011

G125 Findings of the Examinations of Suspected Animal Cruelty Cases Submitted to the Birmingham Jefferson County Animal Control

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After attending this presentation, attendees will understand some of the basic principles of the elements necessary in the investigation of animal cruelty, including characteristic injury patterns and examples of the practical application of comparative forensic pathology.

This presentation will impact the forensic science community by shedding new light on an old technique by showing how both macroscopic and microscopic injuries are a key aspect of an animal cruelty or animal abuse investigation. The techniques developed in this project have the potential to be applied in crime profiling to track animal abuse, which may be a predictor for child abuse or domestic violence.

The objective of this project was to establish routine performance of medical examinations, necropsies, and histopathology as the first step in establishing a solid case of animal abuse.

Comparing the changes in the morphology of the lesions observed in this study with the ones that are in current forensic pathology provided a unique opportunity to record the differences between human pathology and animal pathology. The increase in knowledge in the field of forensic veterinary medicine gives this study merit, because those differences are currently underdeveloped in veterinary science.

In general pathology, it is assumed that humans and animals often exhibit similar physiopathology. For example, in gunshot cases, there are many similarities in the entrance and exit wounds in humans and animals. However, differences occur because of the animal's fur, which can hide a wound, and the structure of the blood vessels, which can change the bleeding patterns. In the case of a dog with an embedded collar, there will be edema in the cervical area above the collar. By combining the principles of general pathology with special veterinary pathology, animal abuse can be accurately documented.

As part of this project, medical examinations, necropsies, and histopathology were performed on more than 50 animals at Birmingham Jefferson County Animal Control during the summer of 2010.

Animal Abuse, Comparative Pathology, Necropsy