



Pathology Biology Section – 2011

G35 Postmortem Animal Injuries: A Forensic Pathologist's Perspective

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After attending this presentation, attendees, will become aware of how traumatic injuries, especially those arising after suspicion of assault, could be instead, inflicted by local fauna where the body was found.

This presentation will impact the forensic science community by showing several cases involving postmortem traumatic lesions produced by different animals, which can lead to misdiagnosis, since they may resemble, inflicted and non-inflicted antemortem lesions. Therefore, postmortem animal injuries must always be taken in consideration by forensic pathologists, with the objective of avoiding mistakes in the initial investigation and further autopsy conclusions.

Postmortem animal predation on human death bodies is an important taphonomic phenomenon in forensic pathology, since animals, depending on their size and environment (land, water, or air), can produce a great variety of lesions. These type of animal injuries can be produced during early and/or late postmortem period creating some forensic implications and difficulties, including: (1) mimicking antemortem lesions, particularly when they are produced shortly after death; (2) modifying antemortem injuries, with loss of identifying features, which may lead to interpretation problems; and, (3) mistaken for signs of assault due to differential diagnostic problems.

This study presents several cases of postmortem injuries produced by animals from different environments, including ants, cats, dogs, sea and river fauna with the corpses being found indoors (home) or outdoors (forest, sea marine and river). The postmortem animal lesions didn't show any vital signs and the majority were located in unprotected body extremities, like face, upper and lower limbs. In these cases, autopsy findings allowed to identify both natural and violent causes of death, including two cases of asphyxia by drowning.

In conclusion, cases like those presented, illustrate that forensic pathologists need to have specific and especially attention when postmortem animal injuries may be present. Apart from the crime scene investigation and the autopsy procedure, it is essential that the pathologist: (1) have knowledge of local fauna, in particular from his own geographic area in order to better understand characteristic injury patterns produced by different animals; (2) always make a careful and detailed examination of the traumatic lesions, including morphological features and topographical distribution, so an accurate trauma etiology diagnosis can be done; and, (3) make a correct differential diagnosis which may clarify between antemortem and postmortem lesions.

Forensic Pathology, Postmortem Injuries, Animal Predation