



### G2 The Interpretation of Canine Scavenging Lesions on Human Corpses

*Vadim Mesli, MD\*, Institut de Medecine Legale, Faculte de Medecine, Lille, Nord 59000, FRANCE; Erwan Le Garff, MD, Institut Médico-Légal/Forensic Institute, Rue André Verhaeghe, Lille Cedex, Nord 59037, FRANCE; Tournel Gilles, MD, PhD, IML de Lille, Faculté de Médecine, 1, place de Verdun, Lille, FRANCE; and Anne A. Becart, DDS, PhD, Service De Medecine Legale, Rue Andre Vaerraeghe, Lille 59000, FRANCE; and Valéry C. Hedouin, MD, PhD, Iml-chu Lille, Rue Andre Verraeghe, Lille 59000, FRANCE*

After attending this presentation, attendees will be better able to interpret forensic cases involving canine scavenging with certain specific postmortem lesions.

This presentation will impact the forensic science community by providing examples of two different suspicious death cases with specific lesions caused by dogs scavenging on human corpses, on different areas of the body, and with unusual mechanisms.

Canine scavenging typically results in skin and/or bone lesions with specific characteristics, but this aspect of the injuries can be difficult to interpret, especially when different mechanisms are combined. Two different cases are presented and illustrated. The first is the case of a 51-year-old man found dead in his garden by a neighbor, his left hand separated from his body, with his dog feeding on it. A bloodstained hatchet was found in the garage at the back of the garden, with blood spots all around the room. At autopsy, an association of different lesions was observed on the left upper limb: sharp, regular and deep cutaneous and bone wounds on the wrist, and irregular and wrinkled wounds, as well as a loss of soft tissue on the forearm. The histological analysis revealed that the lesions on the wrist were antemortem and the ones on the forearm were postmortem. Those findings reflect different injury mechanisms, which should be identified in order to reconstruct the facts: one part of the wound is typically associated with sharp objects, while the other one presents the characteristics of canine scavenging. Death was attributed to an external hemorrhage due to the amputation of the left upper limb by the hatchet found onsite. The manner of death was classified as suicide.

The second case concerns a 72-year-old woman found dead at home by her son, seated on a chair, with a deep loss of tissue around both eyes. The decedent was in a poor general condition and was the owner of a dog. External examination and autopsy revealed isolated loss of soft tissue in both of the periorbital areas, but sparing the eyeballs. No facial bone fracture and no other traumatic injuries were observed, only cutaneous lesions, with respect to her medical history. The aspect of the lesions on the periorbital areas is rarely described and was compatible with licks and bites from a dog. The histological analysis revealed that the facial skin wounds were postmortem. The cause of death was attributed to a cardiac decompensation and the manner of death was classified as natural.

This presentation highlights the unusual injury mechanisms that can be observed in cases of canine scavenging. The injuries are compared with the literature in terms of visual appearance, location on the body, motivation of the animal behavior, and time interval between death and the canine scavenging. An increased knowledge of those lesions, as well as a close collaboration between forensic pathologists and odontologists, can be particularly useful when confronted with similar cases.

#### Scavenging, Dog Bites, Forensic