



### H11 A Fatal Alligator Attack in South Carolina: A Case Report and Review of the Literature

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After attending this presentation, attendees will recognize patterns of injuries inflicted during an alligator attack and will have an appreciation of the difficulties in interpreting antemortem from postmortem wounds in aqueous environments.

This presentation will impact the forensic science community by providing characteristics of alligator injuries and by illustrating the criteria used by forensic pathologists in the determination of the cause of death in cases where bodies recovered from water have injuries consistent with animal predation.

Twenty-four reports of fatal alligator attacks on humans have been reported in Florida since 1973. Several other deaths have been linked to alligator attacks in Texas and Georgia.<sup>1</sup> When bodies are recovered from water, drowning is high on the differential as the cause of death; however, drowning is essentially a diagnosis of exclusion, a determination assigned by forensic pathologists when all other causes of death have been excluded. When bodies are recovered from water with injuries consistent with animal predation, the question often arises, "Did the decedent die from their injuries from the attack, or did they drown and then become prey for the animal?" In aqueous environments, evaluation of wounds for vital reaction in tissue, a phenomenon seen only in injuries occurring during life, is obscured by the leaching of blood out of the wound and into the surrounding water, leaving a pale wound that may be mistaken for a postmortem wound.<sup>2</sup>

In the following case, which has been confirmed as the first death by alligator attack ever recorded in South Carolina state history, this issue was of utmost consideration.<sup>3</sup> In July 2016, an elderly woman with early dementia living in an assisted living facility in Charleston, SC, left her room shortly after midnight. When she was determined to be missing the next morning, a search of the property identified a disarticulated left arm near the bank of a retention pond adjacent to the facility. Her body was recovered from where it was floating in the water approximately 20 feet away. The injuries seen on the body were consistent with those inflicted by an animal. Alligators from a nearby swamp were known to inhabit the shallow pond; a necropsy later recovered the decedent's partially amputated right arm from the suspected alligator. Those involved in the death investigation sought to determine if she had drowned and was subsequently attacked by the alligator, or if the attack itself was responsible for her death.

Comparison with other cases of alligator wounds known to have been inflicted postmortem is presented to illustrate the criteria used by forensic pathologists for determination of antemortem versus postmortem injuries.

#### Reference(s):

1. Armstrong E.J., Erskine K.L. *Water-Related Death Investigation: Practical Methods and Forensic Application*. Boca Raton: CRC Press. 2011.
2. Breitenstein, Dave. (2016, June 15). List: 24 fatal alligator attacks in Florida since 1973. News-Press.com. <http://www.news-press.com/story/life/outdoors/2016/06/15/fatal-alligator-attacks-in-florida/85948492/>. 30 Jul 2016.
3. Cabbagestalk, Shawn. (2016, 29 July). Alligator involved in 90-year-old's death. News 2. <http://counton2.com/2016/07/29/coroner-90-year-old-died-from-multiple-sharp-blunt-force-injuries/>. 30 Jul 2016.

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# Pathology/Biology - 2017

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## Water-Related Deaths, Alligator Attack, Postmortem Wounds

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