



F36 Bite Mark or Snowblower Injury? The Forensic Odontologist's Role in Evaluating Bite Mark Injuries

Richard D. Dial, DDS, 363 South Harlan Street, Suite 110, Lakewood, CO 80226-3552*

After attending this presentation, attendees will understand the importance of completely reviewing all of the data before deciding to accept or decline a bite mark case.

This presentation will impact the forensic community and/or humanity by describing the proper evaluation of case data which is paramount in rendering an effective expert opinion in bite mark cases.

Learning Objective: to examine the dental evidence in a kidnapping and rape case where a unique and less than ideal pattern injury was determined to be a human bite mark. Ultimately, the forensic conclusions assisted the prosecution in presenting the facts of a case to a jury.

If a pattern injury is suspected to be a human bite mark, the role of the forensic odontologist is to provide expertise in the evaluation of all of the evidence before rendering an opinion. The American Board of Forensic Odontology has published Guidelines and Standards for the proper terminology and identification of a bite mark, a specific type of pattern injury. Furthermore, the ABFO has similar guidelines for the terminology used to associate or "link" a suspected biter with a particular lesion. If all the data associated with the case isn't properly evaluated, a lesion that may initially appear to have a low evidentiary value may result in an insufficient work-up of the case.

In the final days of the month of January 1997, a 39-year-old woman escaped from the home of a male companion that she had met earlier in the week at a local bar. The woman had been kidnapped, repeatedly raped and bound for two days. The victim informed the police that she had bitten her abductor. After the suspect was arrested, multiple pattern injuries were noted on his hands. The suspect reported to police that he had injured his hands "repairing a snowblower." The author evaluated a small lesion on the left ring finger and nail of the suspect. The report sent to the police stated that the lesion was "consistent" with a human bite mark.

Later, the victim consented to a forensic odontologic examination that included photographs, radiographs and impressions of her teeth. Subsequently, dental models were made from the impressions and a hand drawn acetate overlay was constructed. Comparisons of the overlay were made to life-size or 1X1 photographs of the injuries on the suspect's finger. A very unique "V" shaped lesion of the finger matched well with the portion of a fractured cusp on the victim's lower right first permanent molar. A strong correlation was made between the pattern injury and the victim's dentition. The district attorney was advised that the victim "most likely" made the injury.

Eventually the case went to trial and the bite mark information was presented. The forensic evidence aided the jury to show that this horrific event was not consensual in nature as claimed by the suspect. The 47-year-old male was found guilty of sexual assault and kidnapping. He was sentenced to 18 years in prison.

In conclusion, the initial bite mark evidence presented in this case was minimal and less than ideal. However, after other forensic dental evidence was obtained, the uniqueness of a single lesion proved to be an effective factor in linking injuries on a suspect's finger to the dentition of a victim.

Finally, the forensic odontologist should evaluate all of the evidence possible before deciding to accept or decline a case. Many times, there is insufficient or poor quality bite mark evidence initially to render an opinion. However, this case supports the theory that after all of the forensic dental data is evaluated, there may be ample information available to provide an expert opinion even though the initial evidence may appear less than ideal.

Human, Bite Marks, Odontology