



F15 Role of Bite Mark Analysis in the Judicial Investigation of an Attempt to Commit Manslaughter: A Case Report

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After attending this presentation, attendees will be informed about the significance and the crucial consequences a bite mark examination can have during a criminal investigation.

This presentation will impact the forensic community by demonstrating the importance of utilizing bite mark guidelines of scientific standard setting organizations during every step of the evidence collection, analysis, and comparison of the evidence and the reporting procedure within a bite mark investigation.

Bite marks on human skin surfaces are patterned injuries remaining after the displacement of soft skin tissues by the hard tooth materials during biting. The dermal pattern that remains is a reactive response of the injured skin on a variety of factors depending on the victim, the biter, all the involved circumstances during the biting act, and the moment of registration. Appropriate scientific examination and analysis of provided and gathered bite mark evidence can afford information putting a criminal investigation on the right track.

In this presentation a soft tissue injury was found on the inner side of the left arm of a woman, a victim of an attempt to commit manslaughter. The victim declared that during the offense the suspect bit on her arm while she was grabbing and holding off a knife clenched in his fist. The suspect proclaimed not to have bitten firmly.

Almost eleven months after the facts, the investigation judge requested a bite mark investigation, asking if the soft tissue injury was a bite mark and if the bite was inflicted by the victim or by the suspect. The presented bite mark investigation had to be performed on bite mark photographs taken by a medical examiner the day after the crime event. After signing a declaration of informed consent, a collection of dental evidence on the victim and suspect was carried out by the appointed odontologists. All the collected information was analyzed and blinded to compare to a line-up of tracings following diverse methods by the two forensic investigators separately. Before reporting the opinion, consultations with other forensic odontologists were taken into consideration.

It was found that the inflicted injury was a human bite mark and with a high degree of certainty the victim could be excluded. The suspect retained was the possible biter. The methodology followed during this bite mark investigation will be demonstrated in the presentation.

This case highlights the importance of the recognition of skin injuries alleged to be caused by human teeth and the immediate consult by forensic odontologists familiar with this specific investigation for correct evidence collection, analysis, and comparison. The results obtained in this case provided the crime investigating authorities new evidence of probative value.

Forensic Odontology, Bite Mark Investigation, Criminal Investigation