



F39 Identifying Bitten Victims: A Case Report of Child Abuse in Brazil

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After attending this presentation, attendees will understand and appreciate how bitemarks can contribute to child abuses investigation.

This presentation will impact the forensic science community by serving as a reference for those dental practitioners and other experts who may be requested to provide a testimony before the court where bitemarks can be the main crime evidence.

Bitemarks in children represent child abuse until proven differently. They are rarely accidental and are good indicators of genuine child abuse. Human bitemarks are identified by their shape and size. They have an elliptical or oval pattern containing tooth and arch marks.

The goal of this presentation is to report a child abuse case in Brazil. A seven-month-old Brazilian female infant was admitted to the Medical Center Pediatric Intensive Care Unit with multiple injuries. A pattern of suspected abuse was established and Child Protective Services was notified. After clinical examination, numerous ovoid and circular pattern injuries were observed by the physician who recognized these as human bitemarks. She immediately notified the forensic odontology department to request a forensic bitemark examination and photographic documentation of the injuries.

There were more obvious bites inflicted to the leg and chest. There were fifteen other bites noted elsewhere on the child's body. It was determined that the bite on the leg would be the most useful as evidence for comparative purposes.

A two year-old male child suspect was indicated. After evaluation and comparison of dental arches with the injuries, the offender was excluded from the possibility of having caused the injuries. He had an anterior open bite and incompatible arches with the teeth marks. Four new suspects were presented by police; two neighbors and the parents of the child. Stone dental casts were made of each person's teeth.

With the use of an imaging software, overlays of the biting edges of the 12 anterior teeth were made for comparison to life-sized images of the bite mark. Among the suspects, the mother was indicated as the responsible individual and during the trial, she confessed the crime.

Bitemarks are found in a significant number of child cases. Most reported cases are the result of attack bites and are recognized and documented only when the victim is examined by a medical examiner-coroner.

Emergency room personnel, family practitioners, and law enforcement personnel can identify and preserve bitemarks in living victims. Bitemark identification entails several cognitive steps –

recognition of the wound, documentation, and interpretation. Early recognition is critical if valuable evidence is to be preserved in child abuse cases. Successful bitemark identification is dependent on a high index of suspicion. Unlike most other crimes against persons, there may be no scene evidence whatsoever, aside from the victim.

The Brazilian experience shown that early recognition of bitemark evidence and its significance in suspected child abuse is possible, and successful prosecution probable, when the primary health officer is alert and responsible. Bitemarks cases have increasingly occurred in Brazilian territory and a lot of cases have been successfully resolved.

Forensic Odontology, Bitemark, Child Abuse