



Bite-marks in Child Abuse: A Pediatric Dentist's Perspective

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Abstract:

The scope of pediatric dentistry is immense, and the role of a pediatric dentist is pertinent in abuse detection in children. They must safeguard the protection of children. Bite mark injuries in children represent child abuse in the majority of cases. Early detection and reporting of such cases can have a lasting impact on the lives of many children. With an attempt to make pediatric dental professionals around the globe aware of the forensic aspect of the specialty, the article suggests the guidelines and protocols required to check and report child abuse.

Keywords: Bite marks, child abuse, detection, forensic, pediatric dentist.

Introduction :

A pediatric dentist plays an imperative role in imparting primary and comprehensive oral health care for children. At the same time, as they may be among the first dental professionals to check for the injuries involving the orofacial structures, it becomes essential to recognize any suspects of child abuse.

By definition, bite marks are “marks caused by the teeth either alone or in combination with other mouthparts”. [1] It should be suspected by the dental professional when bruising, abrasions, lacerations, bleeding/haemorrhage, incision, or avulsion appear on the skin. [2] Bite marks may appear in any part of the body but usually are more observed on the breasts and legs (inner part of thighs) in females, genitals in male children and fingers, arms and shoulders in adult males. [1, 3] Sexually oriented bite marks, and if present, they tend to occur more frequently in adolescents and adults. [4]

Some of the clinical findings associated with child abuse [5] that can assist a pediatric dentist in recognizing a case of child abuse with ease are:

1. Delay in reporting the case and looking for treatment.
2. Explanation of injury not being consistent with the clinical findings.
3. Parental or guardian behaviour may be abnormal during the investigation.
4. Frequent change of explanation by the parents or guardians regarding the cause of injury.
5. Difference in the colour of hematoma suggests repeated trauma to the child patient.

Suggested Guidelines for a Pediatric Dentist:

1. Immediate medical or dental treatment should be initiated, and referral to specialists should be done in cases of extensive trauma requiring expert management.

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2. Correct documentation of data is of paramount importance and should include both positive and negative findings. While recording the dental history, tooth mark examination should be included as it may help in identifying the suspects. At the same time, pediatric dentists should ensure that strict confidentiality of records is maintained.
3. Utmost care must be taken while taking a photograph of the child patient. They should be clearly labelled with the child's identity and properly marked for date and time.
4. Both orientation and close-up photographs should be taken and annotated with descriptions and exact measurements of any injuries.
5. When multiple marks are involved in different parts of a curved surface of the body, then the use of a rigid right-angled reference scale is necessary along with multiple views.
6. Pediatric dentists should consult a forensic odontologist if any case of the adult bite mark is suspected. It is suspected usually if the intercanine distance is more than 3.0 cm. Animal bites may need to be investigated in some cases. [1]
7. However, if smaller dimensions are present, then bites may be self-inflicted. Although rare, the possibility of a congenital neurological disorder cannot be ruled out.
8. Strict protocols should be followed while sampling saliva for DNA in order to ensure validity in court for any samples.
9. Pediatric dentists should undergo formal training in forensic odontology to gather expertise and insights and gain a recognized qualification that will help them in bite mark investigation more efficiently.
10. The pediatric dentist needs to be professional, unbiased and ethical and should not hesitate while reporting cases of child maltreatment. It is equally

important to be aware of the legal measures, including the Juvenile Justice Act and Protection of Children against Sexual Offences Act, along with various child rights law for reporting child abuse. The dental professionals need to be aware of CHILDLINE-India's national emergency helpline phone service for reporting various kinds of abuses against children is 1098- It's toll-free and available 24X7.

Conclusion :

Pediatric dental professionals should acquire sufficient knowledge and expert training to recognize and report suspected cases of child abuse. They can work in alliance with forensic odontologists in providing early diagnosis and giving emergency dental treatment. In addition, they need to be aware of the laws pertaining to child abuse which can help them act in a more professional manner. A multidisciplinary treatment approach in conjunction with appropriate medical and dental specialists is recommended if more extensive traumatic conditions are present.

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