

Craniofacial and oral manifestation of child abuse: A dental surgeon's guide

S. Karthika Nagarajan
COCPAR, Department of Oral
Pathology, Sree Balaji Dental
College, Bharath Institute of
Higher Education and Research,
Chennai, Tamil Nadu, India

Address for correspondence:
Dr. S. Karthika Nagarajan,
COCPAR, Department of Oral
Pathology, Sree Balaji Dental
College, Bharath Institute of
Higher Education and Research,
Pallikaranai, Chennai - 600 100,
Tamil Nadu, India.
E-mail: karthika.
shanmuganathan66@gmail.com

Abstract

Children should be given the privilege to mature in a loving, supportive family environment that promotes the development of an individual to his/her full potential. The abuse and neglect of children is a problem that pervades all segments of society. Dentists/forensic odontologists are in a strategic position to recognize mistreated children. While the detection of dental care neglect is an obvious responsibility for dentists, other types of child abuse and neglect also may present themselves in the dental office. Once this information is known to the dentist, he/she can join physicians in protecting children from injury.

Key words: Child abuse, dentist, neglect, odontologist, oral manifestations

Introduction

Child abuse is a state of emotional, physical, economic, and sexual maltreatment meted out to a person below the age of 18 and is a globally prevalent phenomenon.^[1] More than strangers, care providers themselves and ideal figures of children are involved in child abuse.^[2,3] Dentists trained in a mandated child abuse curriculum can provide valuable information and assistance to physicians about oral and dental aspects of child abuse and neglect.^[4,5]

Types of Child Abuse and Neglect

Child abuse can be classified as physical, emotional, sexual abuses, failure to thrive, intentional drugging or poisoning, and Munchausen syndrome of proxy. The neglect can be health care, dental, safety, physical, or educational.^[6]

Orofacial Injuries in Physical Abuse

Craniofacial trauma with resultant physical injury occurs in more than half of the reported cases of child abuse. It appears likely, then, that dentists frequently treat children who may be victims of physical child abuse. Identification of orofacial injuries *per se* should present little difficulty to the astute dental clinician. However, ascertainment of suspected child abuse from orofacial injuries can be extremely problematic.^[7] Careful intraoral examination and perioral examination are necessary in all cases of suspected abuse. Some authorities believe that the oral cavity may be a central focus for physical abuse because of its significance in communication and nutrition.^[8]

The injuries most commonly are inflicted with blunt trauma with an instrument, eating utensils, hands or fingers, or by scalding liquids or caustic substances [Figure 1].^[9,10]

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Nagarajan SK. Craniofacial and oral manifestation of child abuse: A dental surgeon's guide. J Forensic Dent Sci 2018;10:5-7.

Access this article online	
Website: www.jfds.org	Quick Response Code 
DOI: 10.4103/jfo.jfds_84_16	

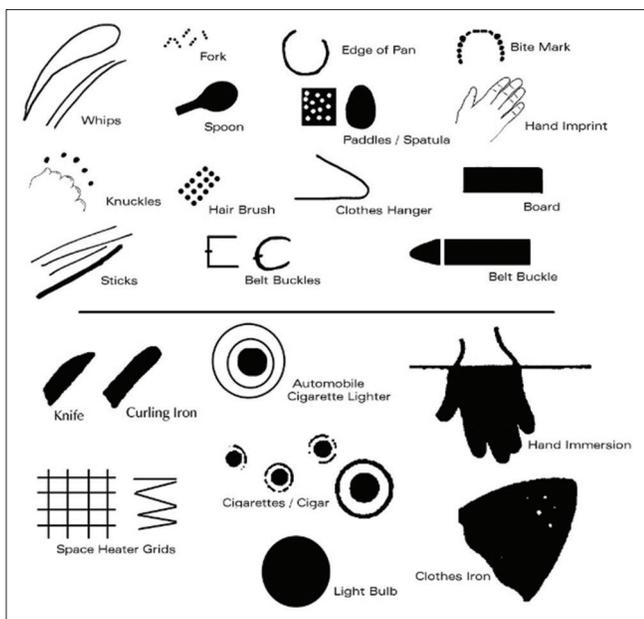


Figure 1: Common patterns of bruise marks (Source: Child Abuse Watch abusewatch.net Florida: One Child International Inc., c 2008 – 12 (updated 2012; cited 2017 mar 22). Available from: <http://www.Child AbuseWatch abusewatch.net>)

Age-appropriate nonabusive injuries to the mouth are common and must be distinguished from abuse on the basis of history, the circumstances of the injury and pattern of trauma [Figure 2], and the behavior of the child, caregiver, or both.^[11] Discolored teeth, indicating pulpal necrosis, may result from previous trauma.^[12]

Injuries to the Craniofacial Complex

Physical injuries to the craniofacial complex in child abuse include facial, head, and intraoral injuries in decreasing frequency of occurrence. Facial injuries include, in order of decreasing frequency, contusions and ecchymoses (bruises), abrasions and lacerations, and miscellaneous injuries in decreasing frequency. Intraoral injuries include contusions and ecchymoses, abrasions and lacerations, and trauma to the dentition in decreasing frequency. Physically abused children are often young children. A dentist is most likely to detect inflicted injuries of the face and mouth (e.g., slap marks, pinched ears, or bite marks). Since physical punishment is commonplace in our society, physicians and dentists need guidelines as to when corporal punishment is excessive and therefore representative of physical abuse.^[13]

Role of Dentist in Preventing Child Abuse

Dental practitioners have four ‘R’s of responsibility—recognize, record, report, and refer—to protect our patients and their families from the cycle of violence, all too prevalent in the society today.^[14] When a child has oral injuries or dental neglect is suspected, the child will benefit

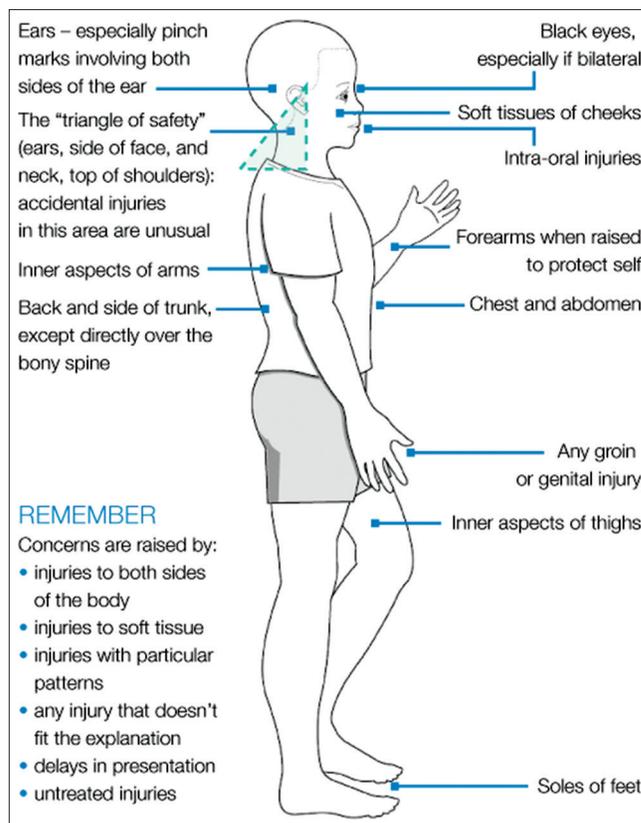


Figure 2: Common areas of suspectable bruises (Source: Child Abuse Watch abusewatch.net Florida: One Child International Inc., c 2008 – 12 (updated 2012; cited 2017 mar 22). Available from: <http://www.Child AbuseWatch abusewatch.net>)

from the physician’s consultation with a pediatric dentist or a dentist with formal training in forensic odontology.^[10] The pedodontist sees many young children for comprehensive care and preventive dentistry programs. Pediatric dentists and oral and maxillofacial surgeons, whose advanced education programs include a mandated child abuse curriculum, can provide valuable information and assistance to physicians about oral and dental aspects of child abuse and neglect. Physician members of multidisciplinary child abuse and neglect teams should identify such dentists in their communities to serve as consultants for these teams. In addition, physicians with experience or expertise in child abuse and neglect should make themselves available to dentists and to dental organizations as consultants and educators. Such efforts will strengthen our ability to prevent and detect child abuse and neglect and enhance our ability to care for and protect children.^[15]

Conclusion

Dentists with an interest in child abuse and some training in forensic dentistry should express their interest to various state agencies, such as state welfare departments and hospital trauma teams, in serving as dental consultants. It is extremely important for all appropriate agencies and for

central registries at central, state, and local levels to have dental consultants for evaluation of oral lesions in cases of suspected abuse and for training of personnel.^[9]

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Kacker L, Mohsin N, Dixit A, Varadan S, Kumar P, UNICEF. Study on child abuse: India, New Delhi: Ministry of Women and Child Development, Government of India: 2007;122-34.
2. Walsh K, Latzman NE, Latzman RD. Pathway from child sexual and physical abuse to risky sex among emerging adults: The role of trauma-related intrusions and alcohol problems. *J Adolesc Health* 2014;54:442-8.
3. Young JC, Widom CS. Long-term effects of child abuse and neglect on emotion processing in adulthood. *Child Abuse Negl* 2014; 38:1369-81.
4. Kellogg N. Oral and Dental Aspects of Child Abuse and Neglect. *Pediatrics*; 2005;116;1565-67.
5. Jessee SA. Physical manifestations of child abuse to the head, face and mouth: A hospital survey. *ASDC J Dent Child* 1995;62:245-249.
6. Herrenkohl, RC. The definition of child maltreatment: from case study to construct. *Child Abuse and Neglect* 2005;29:413.
7. Costacurta M, Benavoli D, Arcudi G, Docimo R. Oral and dental signs of child abuse and neglect. *Oral & Implantology* 2015;8:68-73.
8. Bellemare S. Child abuse by suffocation: A cause of apparent life-threatening events. *Paediatrics & Child Health*. 2006;11:493-5.
9. Pretty IA. The barriers to achieving an evidence base for bite mark analysis, *Forensic science international* 2006; 159S: S110-S120.
10. Jesse SA. Recognition of bite marks in child abuse cases. *Pediatric Dentistry* 1994;16:336-39.
11. Graham DI. Paediatric head injury. *Brain* 2001;7:1261-2.
12. Vadiakas G, Roberts MW, Dilley DC. Child abuse and neglect: ethical issues for dentistry. *J Mass Dent Soc* 1991;40:13-5.
13. Kenney JP. *Forensic Science International* 2006;159S:S121-5.
14. Oral and dental aspects of child abuse and neglect. *American Academy of Pediatrics* 1999;104:348-50.
15. Tsang A, Sweet D. Detecting child abuse and neglect – are dentists doing enough? *J Can Dent Assoc* 1999; 65:387-91