

## Review Article

# CHILD ABUSE AND NEGLECT – A REVIEW

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### ABSTRACT:

Child abuse and neglect had increased dramatically in past ten years and this data is still under reported. Dentists 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. The characteristics and diagnostic findings of physical abuse (non-accidental trauma), sexual abuse, failure to thrive (nutritional neglect), intentional drugging or poisoning, Mumhausen's syndrome by proxy, health care neglect safety neglect, emotional abuse, and physical neglect all should be familiar to the dentist. Therefore, physicians and dentists are encouraged to collaborate to increase the prevention, detection, and treatment of these conditions.

Key Words: Child abuse, Dental Neglect, Sexual abuse, Physical abuse, Emotional abuse.

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### INTRODUCTION:

Over the past two decades, the incidence of child abuse and neglect has increased dramatically, to the point where approximately 3.6 million cases were reported, with twenty-five percent substantiated as victims of child maltreatment, in 2005. The reporting and investigation of child maltreatment, and the response to it, involve people from many different walks of life, ranging from parents, relatives, and acquaintances to childcare workers, teachers, association members, volunteers in children's aid societies, Child Protection Offices, police officers, prosecutors, and judges. From the 1960s onward, the topic of child abuse and neglect has received more attention from physicians as well, above all from pediatricians, pediatric surgeons, specialists in child psychiatry and psychosomatic medicine, general practitioners, and forensic physicians.<sup>1,2</sup>

It was in the second half of the 20th century that society began to take greater notice of violence against children. Child abuse and neglect (maltreatment) is a widespread problem that permeates all ethnic, cultural, and socioeconomic segments of our society.<sup>3</sup> A careful and thorough intraoral and perioral examination is necessary in all cases of suspected abuse and neglect. In addition, all suspected victims of abuse or neglect, including children in state custody or foster care, should be examined carefully not only for signs of oral trauma but also for caries, gingivitis, and other oral health problems. Some authorities believe that the oral cavity may be a central focus for physical abuse because of its significance in communication and nutrition.<sup>4</sup> Oral injuries may be inflicted with instruments such as eating utensils or a bottle during forced feedings;

hands; fingers; or scalding liquids or caustic substances. The abuse may result in contusions, burns, or lacerations of the tongue, lips, buccal mucosa, palate (soft and hard), gingiva alveolar mucosa, or frenum; fractured, displaced, or avulsed teeth; or facial bone and jaw fractures.<sup>5</sup>

Health Canada defines child abuse as mistreatment by a parent, guardian, caregiver or other person in a position of trust that results in injury or significant emotional or psychological harm to the child.<sup>6</sup>

Dental neglect, as defined by the American Academy of Pediatric Dentistry, is the “willful failure of parent or guardian to seek and follow through with treatment necessary to ensure a level of oral health essential for adequate function and freedom from pain and infection.”<sup>7</sup>

In this review article we have discussed various types of child abuse and method of identification of it with special emphasis on role of dentist in managing such cases.

#### **TYPES OF CHILD MALTREATMENT:<sup>8,9</sup>**

**Physical abuse:** It means any force or action that exceeds the force considered reasonable for disciplining a child and that results in non-accidental injury.

**Sexual abuse:** It involves any sexual exploitation (non-consensual or consensual) including, but not limited to, intercourse, oral sex and fondling.

**Emotional abuse:** It includes acts of commission or omission by a parent that may lead to long-term and serious emotional disorders. Examples include social isolation, rejection, humiliation and placing unrealistic demands on a child.

**Neglect:** It occurs when parents do not provide the requisites necessary for the child’s emotional, psychological and physical development. Emotional neglect involves the absence of feeling loved, safe and worthy. Physical neglect involves lack of proper nutrition, shelter, clothing, medical care and protection from harm.

#### **History, physical examination, diagnostic assessment<sup>10-12</sup>**

##### **The suspicion of child abuse**

The suspicion of child abuse may arise because of the pattern of injury that is found, e.g., an injury at a site where blows are typically struck or with a typical appearance, such as parallel stripes. The plausibility of the proposed mechanism of injury is of prime importance. Aside from this, a number of circumstances of other types can indicate the likelihood of child abuse:

- A child that has been injured through abuse is often not taken to the doctor immediately, but only after a delay.
- The history of the event as recounted to the doctor is inconsistent with the type of injury seen, the symptoms and signs, and/or the child’s developmental state.
- Further ongoing questioning elicits multiple different versions of the history of the event.
- Siblings are said to have caused the injury.
- It may be stated that the child injured himself or herself.
- The psychodynamic evaluation may yield evidence of child abuse when the parents behave defensively, instead of showing the appropriate empathy and concern.
- If abuse is suspected, question the child first, away from the parent, about the cause of his or her injury. Seek the same information from the parent(s) to see if both accounts are similar.
- Note findings in the patient’s chart with detailed description of the injuries and accounts given for their occurrence.
- The dentist should always document personal opinion why child maltreatment is suspected.
- If a report will be filed with proper authorities, the parent(s) should always be informed.

##### **History**

As soon after the event as possible, a detailed account of the events leading to the injury should be obtained and documented. Who did what, when, and how? Who else was present? What action did the parents take? What type of first aid, if any, was administered? Was the child taken to the doctor immediately, or only after a delay? Had there been any preceding problems or fights? Are there any exceptional stresses in the family, including a possible family history of child abuse? What was the parents’ emotional reaction? <sup>13</sup>

**Table 1:** Clinical signs of child maltreatment<sup>14</sup>

**At reception**

1. Routinely observe children for unusual behaviour. Evaluate hygiene, outward signs of proper nourishment, and general health. Is the child's clothing appropriate for the present weather?
2. Are there any wounds or bruises on the child's face or body?
3. How does the child respond to others? Abused children may act aggressively by showing inappropriate anger and loss of control, or they may be sullen, stoic or withdrawn.

**Extraoral examination**

1. Examine the head and neck for asymmetry, swelling and bruising; inspect the scalp for signs of hair pulling; check the ears for scars, tears and abnormalities
2. Look for bruises and abrasions of varying colour, which indicate different stages of healing. Check for distinctive pattern marks on skin left by objects such as belts, cords, hangers or cigarettes.
3. Examine the middle third of the face for bilateral bruising around the eyes, petechiae (small red or purple spots containing blood) in the sclera of the eye, ptosis of the eyelids, or a deviated gaze, a bruised nose, deviated septum or blood clot in the nose.
4. Check for bite marks, which may be the result of uncontrollable anger by the adult or another child. Bite marks in areas that cannot be the result of self-inflicted wounds are never accidental.

**Intraoral examination**

1. Burns or bruises near the commissures of the mouth may indicate gagging with a cloth or rope. Scars on the lips, tongue, palate or lingual frenum may indicate forced feeding. Oral manifestations of sexually transmitted diseases may indicate sexual abuse.
2. A torn labial frenum is an intraoral finding that may indicate abuse. Remember that a child's age is an important consideration since a frenum tear in a young child who is learning to walk is not unusual.
3. The cause of hard tissue injuries due to trauma, such as fractured or missing teeth or jaw fractures, should be investigated.

**Physical examination**

The child should be fully undressed, and the whole body should be examined thoroughly, including the ano genital region. The growth parameters should also be measured and noted in percentiles. Injuries should be described precisely, with indications of their localization, size, shape, and nature. (For example, a typical, fresh injury of the "self-defense" type could be described as follows: extensor surface of right forearm, middle third, 3 × 2 cm ovoid swelling, well demarcated, bluish-purple.) When indicated, the contour of the injury should also be described, e.g., when this provides a clue toward the type of object with which the child was struck. All injuries should be measured and photographically documented.

**EMOTIONAL ABUSE AND NEGLECT<sup>15, 16</sup>**

Emotional abuse can be defined as the continual scapegoating and rejection of a child by parents or caretakers. Occasionally, a teacher emotionally abuses students. Severe verbal abuse and berating is often part of emotional abuse. Emotional abuse is often difficult to detect. Less vivid cases of emotional abuse require the following criteria:

- (a) severe psychopathology and disturbed behavior in the child, of a degree making it unlikely that he will be able to function and cope as an adult, documented by a psychiatrist or psychologist;
- (b) abnormal child-rearing practices of the parent or caretaker that have caused a large part of the child's behavior disturbances; and
- (c) the continued refusal by the parent of treatment for the child and himself.

These cases easily can be presented as depriving a child of needed mental health care. Situations can be presented with less evidence, however, when the parent or caretaker is floridly psychotic, and hence inadequate to care for the child, or severely depressed, and hence a danger to the child.

**SEXUAL ABUSE:<sup>17, 18</sup>**

Sexual abuse can be defined as any sexual activity with a child under age 18 by an adult. Most offenders are family-related, some are family acquaintances and the least common are strangers.

Estimates are as high as one in four females having been sexually abused in childhood. The figures for men are more allusive since men are more reluctant to talk about past abuse but the estimates run around

one in seven men. The symptoms typically reported consisted of fear, anxiety, nausea, dissociation, flashbacks and feelings of shame. The shame can be about being anxious, about their poor oral health, or about having someone find out about the abuse. There is much disagreement about what defines sexual abuse and what constitutes molestation and how a severity index can be applied to an individual's trauma experience. Sexual abuse may involve any number of behaviors, not all of them include actual body contact. Abuse may be considered on a continuum that may range from exhibitionism to actual intercourse, moving from nudity, to the exposure of genitals, kissing, fondling, masturbation, oral sex, digital penetration to penile penetration.<sup>17</sup> As with all suspected child abuse or neglect, when sexual abuse is suspected or diagnosed in a child, the case must be reported to child protective services and/or law enforcement agencies for investigation.<sup>19-21</sup>

#### **BITE MARKS**

This type of injury is usually associated with physical or sexual abuse. In such suspected cases, a forensic pathologist or odontologist should be contacted.<sup>22, 23</sup> Acute or healed bite marks may indicate abuse. Bite marks should be suspected if any area of body show abrasion or laceration which appear as oval or circular configuration. An area of hemorrhage, represent a "suck" or "thrust" mark, may be found between tooth marks, suggesting physical or sexual abuse. Although marks may occur anywhere on a child's body, the most common sites are the cheeks, back, sides, arms, buttocks, and Genitalia.

Bite marks should be identified whether is from animal or human being. Bites produced by dogs and other carnivorous animals tend to tear flesh, whereas human bites compress flesh and can cause abrasions, contusions, and lacerations but rarely avulsions of tissue. An intercanine distance (ie, the linear distance between the central point of the cuspid tips) measuring more than 3.0 cm is suspicious for an adult human bite.<sup>24</sup> The pattern, size, contour, and color of the bite mark should be evaluated by a forensic odontologist. It should be documented by taking photograph with an identification tag and scale marker (eg, ruler) in the photograph. In addition to photographic evidence, every bite mark that shows indentations should have a polyvinyl siloxane impression made immediately after swabbing the bite mark for secretions containing DNA. This

impression will help provide a three-dimensional model of the bite mark. Written observations and photographs should be repeated daily for at least 3 days to document the evolution of the bite. Because each person has a characteristic bite pattern, a forensic odontologist may be able to match dental models (casts) of a suspected abuser's teeth with impressions or photographs of the bite.<sup>24</sup>

#### **MUNCHAUSEN SYNDROME BY PROXY**

It describes children who are victims of parentally fabricated or induced illness.<sup>25</sup> The children are usually too young to reveal the deception usually under age 6). The fabricated symptoms and signs lead to unnecessary medical investigations, hospital admissions, and treatment. The person caring for the child denies knowledge of the true causes of the child's disease manifestations. The mother often is a nurse or has a similar illness herself. Factitious symptoms are often of bleeding from various sites. If specimens are requested, the mother adds her own blood to the material. Factitious signs include recurrent sepsis from injecting contaminated fluids, chronic diarrhea from laxatives, fever from rubbing thermometers, or rashes from rubbing the skin or applying caustic substances.<sup>26</sup> The incidence of MSBP is estimated at 2.5 cases per 100 000 children in the first year of life. It is said to be fatal in 6% to 33% of cases; one manifestation of MBSP, for example, is asphyxiation of an infant under soft bedcovers, which can be initially mistakenly diagnosed as sudden infant death syndrome (SIDS).<sup>27, 28</sup>

#### **SHAKING TRAUMA SYNDROME**

Shaking trauma syndrome (STS), also called shaken baby syndrome (SBS), is a syndrome of traumatic injury consisting of subdural hematoma, retinal hemorrhages, and severe, diffuse brain injury, leading to the immediate appearance of neurological abnormalities (irritability, excessive sleep, vomiting, muscular hypotonia, somnolence, apathy, coma, epileptic seizures).<sup>29, 30</sup> External injury is typically absent. Depending on where the abuser gripped the child, there may also be paravertebral serial rib fractures or metaphyseal fractures of the humerus or femur. In addition to the whiplash mechanism, rotational and shearing forces play a major role in generating this type of injury. According to the literature, shaking trauma is fatal in 12% to 20% of cases; 5% to 10% of the victims remain in a

vegetative state, 30% to 40% are blind or visually impaired in one eye or both, 30% to 50% suffer from spastic paralysis or marked motor developmental retardation, and 30% develop epileptic seizures.<sup>31-35</sup>

## CONCLUSIONS

Clinicians should be aware that physical or sexual abuse may result in oral or dental injuries or conditions that sometimes can be confirmed by laboratory findings. Furthermore, injuries inflicted by one's mouth or teeth may leave clues regarding the timing and nature of the injury as well as the identity of the perpetrator. Clinicians are encouraged to be knowledgeable about such findings and their significance and to meticulously observe and document them. Through early detection and reporting, dentists have the opportunity to prevent further injury or neglect to children suspected of having been maltreated. When questions arise or when consultation is needed, a pediatric dentist or a dentist with formal training in forensic odontology can ensure appropriate testing, diagnosis, and treatment. Thus, every time we prevent an individual from being abused, we may be protecting future victims as well. Recognizing and breaking this intergenerational cycle of violence is everyone's responsibility. Dentists have an opportunity to take a proactive role in helping these victims.

## REFERENCES:

1. U.S. Department of Health & Human Services: Administration for Children & Families. Child Maltreatment 2005. Washington DC: U.S. Government Printing Office, 2007.
2. National Center on Child Abuse Prevention Research. 2005 National Child Maltreatment Statistics. Prevent Child Abuse America. 2007.
3. Kullmer HT, Hövels O, Jacobi G: Kindesmisshandlung in der Bundesrepublik Deutschland. Monatsschr Kinderheilkunde 1982; 130: 710-3.
4. Vadiakas G, Roberts MW, Dilley DC. Child abuse and neglect: ethical issues for dentistry. J Mass Dent Soc. 1991;40:13-15
5. Naidoo S. A profile of the oro-facial injuries in child physical abuse at a children's hospital. Child Abuse Negl. 2000;24:521-534
6. Province of British Columbia. Inter-ministry child abuse handbook. An integrated approach to child abuse and neglect. Victoria (BC): Ministry of Social Services and Housing; 1988.
7. American Academy of Pediatric Dentistry. Definition of dental neglect. *Pediatr Dent*. 2003;25(suppl):7
8. Becker DB, Needleman HL, Kotelchuck M. Child abuse and dentistry: orofacial trauma and its recognition by dentists. *J Am Dent Assoc*. 1978;97:24-28
9. Kittle PE, Richardson DS, Parker JW. Two child abuse/child neglect examinations for the dentist. *ASDJ J Dent Child* 1981; 48:175-80.
10. Jacobi G (ed.): Kindesmisshandlung und Vernachlässigung. Epidemiologie, Diagnostik und Vorgehen. Bern: Verlag Hans Huber 2008.
11. Herrmann B, Dettmeyer R, Banaschak S, Thyen U: Kindesmisshandlung. Medizinische Diagnostik, Intervention und rechtliche Grundlagen. Heidelberg: Springer-Verlag 2008; 144-55.
12. AWMF Leitlinien der DGSPJ, DGKJ, DGKCh (Deutsche Gesellschaft für Sozialpädiatrie und Jugendmedizin, übernommen von der Deutschen Gesellschaft für Kinder- und Jugendmedizin und der Deutschen Gesellschaft für Kinderchirurgie, 2008/2009) Kindesmisshandlung und Vernachlässigung (Teil 1: Psychosoziale Faktoren, Prävention und Intervention; Teil 2: Somatische Diagnostik): AWMF-Leitlinien-Register Nr. 071/003 ; Entwicklungsstufe 2; leitlinien.net
13. Wachtel A. Child abuse: a discussion paper. Ottawa (ON): Health and Welfare Canada; 1989.
14. Tsang A, Sweet D. Detecting Child Abuse and Neglect - Are Dentists Doing Enough? *J Can Dent Assoc* 1999; 65:387-91
15. Krugman RD, Krugman MK: Emotional abuse in the classroom. *Am J Dis Child* 38:28446, 1984.
16. Schmitt BD. Types of child abuse and neglect: an overview for dentists. *Pediatric Dentistry*: May 1986;8: 67-71
17. Rimsza ME, Niggeman EH: Medical evaluation of sexually abused children: A review of 311 cases. *Pediatrics* 1982;69-14.
18. Jones GJ. Sexual abuse of children. *Am J Dis Child* 1982;136:142-46.
19. Mouden LD, Bross DC. Legal issues affecting dentistry's role in preventing child abuse and neglect. *J Am Dent Assoc*. 1995;126:1173-1180

20. Schwartz S, Woolridge E, Stege D. The role of the dentist in child abuse. *Quintessence Int.* 1976;7:79–81
21. Sognaes RF, Blain SM. Child abuse and neglect: I. Diagnostic criteria of special interest to dentists [abstract]. *J Dent Res.* 1979;58(spec issue A):367
22. Stechey F. Bite marks and cans – child abuse and neglect syndrome. *Ont Dent* 1991;68:19-20.
23. Dorion RB. Bite mark evidence. *J Can Dent Assoc* 1982;48:795-798.
24. Wagner GN. Bitemark identification in child abuse cases. *Pediatr Dent.* 1986;8:96–100
25. Meadow R Munchausen syndrome by proxy. *Arch Dis Child* 5792-98, 1982.
26. Noeker M, Keller KM: Münchhausen-by-proxy-Syndrom als Kindes -misshandlung. *Monatsschr Kinderheilkde* 2002; 150: 1357–69.
27. Jacobi G (ed.): *Kindesmisshandlung und Vernachlässigung. Epidemiologie, Diagnostik und Vorgehen.* Bern: Verlag Hans Huber 2008.
28. Jacobi G: Schadensmuster schwerer Misshandlungen mit und ohne Todesfolge. *Monatsschr Kinderheilkde* 1986; 134: 307–15.
29. Herrmann B: Nichtakzidentelle Kopfverletzungen und Schütteltrauma. *Klinische und pathophysiologische Aspekte. Rechtsmedizin* 2008; 18:9–16.
30. Matschke J, Herrmann B, Sperhake J, Körber F, Bajanowski T, Glatzel M: Shaken-baby-syndrome — a common variant of nonaccidental head injury in infants. *Dtsch Arztebl Int* 2009; 106(13) 211–7.
31. Jacobi G (ed.): *Kindesmisshandlung und Vernachlässigung. Epidemiologic, Diagnostik und Vorgehen.* Bern: Verlag Hans Huber 2008.
32. U.S. Department of Health & Human Services: *Child Maltreatment* 2007. <http://www.acf.hhs.gov/programs/cb/pubs/cm07/cm07.pdf>
33. Jacobi G: Schadensmuster schwerer Misshandlungen mit und ohne Todesfolge. *Monatsschr Kinderheilkde* 1986; 134: 307–15.
34. Minns RA, Brown JK (eds.): *Shaking and other non-accidental head injuries in children.* London, Mac Keith Press, distributed by Cambridge University Press 2005; p. 1–105, 364–14.
35. Willman KY, Bank DE, Senac M, Chadwick DL: Restricting the time of injury in fatal inflicted head injuries. *Child Abuse & Neglect* 1997; 21:929–40.

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