Oral and Dental Aspects of Child Abuse and Neglect

In all 50 states, physicians are required to report suspected cases of child abuse and neglect to social service or law enforcement agencies. Dentists are similarly required to report such suspected cases in most states and are allowed to report in all states; however, a minority of dentists are aware of these legal requirements. Physicians and dentists could aid in educating each other and in collaborating to increase the detection, treatment, and prevention of these disorders. Physicians typically receive limited training in dental injury and disease and thus may not detect dental abuse or neglect as readily as they do child abuse and neglect involving other areas of the body.

PHYSICAL ABUSE

Because craniofacial injuries occur in half of child abuse cases, evaluation of these injuries is essential. Some authorities believe the oral cavity may be a central focus for physical abuse because of its significance in communication and nutrition. The injuries are most commonly inflicted as blunt trauma with an instrument, eating utensil, hand, or finger or by scalding liquids or caustic substances. The abuse may result in ecchymoses, lacerations, traumatized or avulsed teeth, facial fractures, burns, or other injuries. Discolored teeth may result from repeated trauma. Gags applied to the mouth may leave bruises, lichenification, or scarring at the corners of the mouth. Multiple injuries, injuries in different stages of healing, injuries inappropriate for the child’s stage of development, and/or a discrepant history should arouse suspicion of abuse.

SEXUAL ABUSE

The oral cavity is a frequent site of sexual abuse in children. The presence of oral and perioral gonorrhea or syphilis in prepubertal children is pathognomonic of sexual abuse. Pharyngeal gonorrhea is frequently asymptomatic. Therefore, when a diagnosis of gonorrhea is made, lesions should be sought in the oral cavity and appropriate cultures should be obtained even if no lesions are detected.

When gonorrhea is diagnosed in a child, case finding efforts should include adults with whom the child had any contact during the preceding week, concentrating on asymptomatic men and women with a history of genital symptoms. When obtaining oral or pharyngeal cultures for Neisseria gonorrhoeae, the physician must specifically ask for culture material that will grow and differentiate this organism from Neisseria meningitidis, which normally inhabit the mouth and throat. Gonococci will not grow in routine throat cultures. In the rare case of syphilis in the sexually abused child, oral lesions should also be sought and darkfield examinations performed. Oral or perioral condylomata acuminata, although probably most frequently caused by sexual contact, may be the result of contact with verruca vulgaris or self-inoculation. Unexplained erythema or petechiae of the palate, particularly at the junction of the hard palate and soft palate, may be evidence of fellatio.

BITE MARKS

Bite marks are lesions that may indicate abuse. Dentists may be of special help to physicians in detecting and evaluating bite marks related to physical and sexual abuse. Bite marks should be suspected when ecchymoses, abrasions, or lacerations are found in an elliptical or ovoid pattern. Bite marks inflicted during sexual abuse may have a central area of ecchymoses or "suck mark." The normal distance between the maxillary canine teeth in adult humans is 2.5 to 4.0 cm, and the canine marks in a bite will be the most prominent or deep parts of the bite. Bites produced by dogs and other carnivorous animals tear flesh, whereas human...
bites compress flesh, causing only contusions.\textsuperscript{9} If the intercanine distance is less than 3 cm, the bite may have been caused by a child. If the intercanine distance is larger, the bite was probably produced by an adult. The size, contour, and color(s) of the bite mark should be evaluated by a forensic odontologist (dentist) or forensic pathologist, if possible. If this specialist is not available, the bite mark’s characteristics should be observed and documented by the attending physician. Repeated written observations and photographs will document the involution and further delineate age of the bite. Because each individual has a characteristic bite pattern, a forensic odontologist or forensic pathologist may be able to match molds (casts) of a suspected abuser’s teeth with molds of the bite itself, if there is sufficient tissue damage to produce a meaningful mold.\textsuperscript{8,21,22}

Blood group substances are secreted in saliva and may be deposited in bites. Even if dried, this saliva may be collected on a sterile cotton swab, moistened with isotonic saline, and replaced in a sealed vial. A control sample should be obtained from an uninvolved area of the child’s skin. These samples should be sent to a forensic laboratory for prompt analysis. Although this technique is useful, results are not infallible.\textsuperscript{21}

**DENTAL NEGLECT**

Failure to obtain proper dental care may result from (1) family isolation, (2) lack of finances (more of a problem for dental care than for medical care), (3) parental ignorance, or (4) lack of perceived value of oral health.\textsuperscript{21}

As with child neglect in general, dental neglect has some definitional problems. Definitions of dental neglect in children include, “negligence or maltreatment that harms their oral health,” and, somewhat more specifically, “failure by a parent or guardian to seek treatment for visual, untreated caries, oral infections and/or oral pain, or failure of the parent or guardian to follow through with treatment once informed that the above condition “exists.”\textsuperscript{23}

The problem physicians and dentists both face is, “when is it neglect?” An untreated small cavity in a deciduous tooth that will be shed in a few weeks is not neglect. Rampant caries with multiple alveolar abscesses is neglect. Between these extremes, it is difficult to determine the boundary.

Indicators of dental neglect include (1) untreated rampant caries, easily detected by a layperson; (2) untreated pain, infection, bleeding, or trauma affecting the orofacial region; and (3) history of a lack of follow-through for care in children with identified dental pathology.

In the presence of these indicators, the physician or dentist should be certain that the caretakers understand the explanation of the pathology and its implications and, when financial barriers to the needed care exist, attempt to assist these families in finding monetary aid or public facilities for needed services. If, in spite of these efforts, the parents continue to refuse therapy, such cases should be reported to appropriate social service departments.

**CONCLUSION**

In evaluation of physical or sexual abuse or neglect, physicians will benefit from consultation with dentists, especially those having experience or expertise with children—particularly abused children. 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 detect child abuse and neglect and enhance our ability to care for children.

**REFERENCES**

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