Child abuse: case report

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Abstract

An instance of child abuse discovered by a dentist is presented. The step-wise patient evaluation, treatment, protection, reporting of findings, family counseling, legal intervention, and final case resolution are reviewed. The interaction of multiple disciplines and skilled professionals is necessary for positive resolution of all issues.

As reported by numerous authors,[1-4] abused children first may present to the dentist, pediatrician, or hospital emergency room with traumatic injuries of the face. The patient evaluation, treatment, protection, reporting of findings, family counseling, legal proceeding, and final resolution require the skilled intervention of numerous professionals. Presented here is a case of an abused child first noted by a pediatric dentist.

Patient Presentation

A 4-year-old black male presented to a hospital dental clinic with a chief complaint of injuries secondary to a fall at home. These injuries included facial and oral lacerations, facial bruises, and displacement of primary teeth.

Medical/Dental History

The child was apparently healthy with a negative medical history except for the observation that there had been irregular and inconsistent pediatric care. This history of injuries was conveyed by the mother. Two hours previously he had fallen at home and had hit his face against a table. He had been playing with a toy and no adult was present when the injury occurred. He was brought to the hospital due to intraoral bleeding and displaced teeth.

Orofacial Examination

A slightly small and shy male presented with several arm and facial abrasions and bruises which were healing in an apparently unremarkable manner.

Recent injuries included bruised upper and lower lips and a 3 × 4 cm bruise of the chin. Intraoral examination revealed lacerations of the anterior maxillary gingiva and alveolar mucosa areas. Intrusion of the primary left maxillary lateral incisor was noted and the primary left central incisor was absent (Fig 1). A moderate number of carious lesions were noted. No restorations were present and oral hygiene was poor. There was tenderness in all bruised areas, but especially adjacent to the intruded teeth and upon manipulation of the mandible. Slight mobility of the anterior portion of the mandible was noted.

Intraoral maxillary radiographs verified the intruded primary left lateral incisor and avulsion of the primary left central incisor. A lower occlusal radiograph demonstrated a fracture of the mandible between the central and lateral incisors (Fig 2).

The presence of significant multiple injuries was quite disproportionate to the given history of a moderately traumatic event. It also was noted that there were differences in the healing stages of his bruises and that lesions had apparently occurred over a period of time. Furthermore, a number of other (i.e., nonfacial) bruises were noted which were of a severity and of a pattern suggesting possible inflicted injury.

The mother was questioned further relative to the present injuries and in general terms about the other lesions. Consent was obtained for photography of the traumatized areas (although not legally necessary in these circumstances).

Treatment of Current Injuries

Intraoral lesions were cleansed and the patient was referred to the emergency room for a pediatric medical evaluation. The clinical findings of multiple, sus-

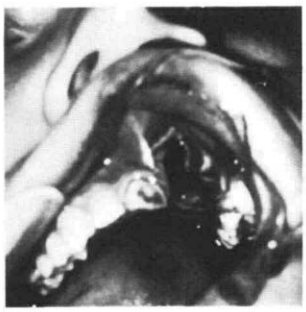


FIG 1. Intraoral appearance revealing lacerations of the gingiva and intrusion of the primary maxillary left lateral incisor and avulsion of the primary maxillary left central incisor.

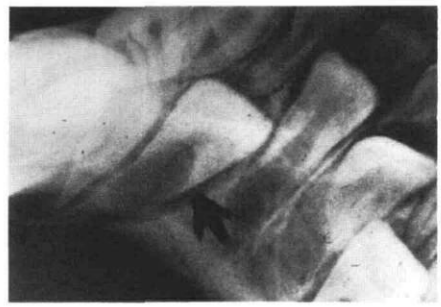


FIG 2. Intraoral radiograph depicting fracture of the mandible between the central and lateral incisors.

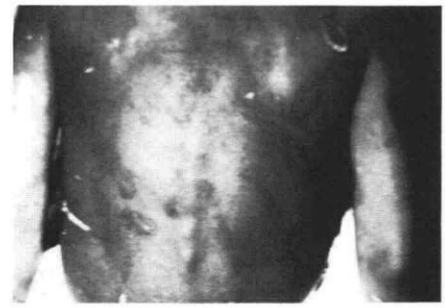


FIG 3. Patient's back revealing bruises from belt loops.

picious injuries in various stages of healing on his face and extremities required a thorough physical examination.

Physical and Laboratory Findings

Examination revealed multiple bruises predominantly on the back and right arm, varying in color from reddish-purple to brown, with many having the pattern of "loopmarks" (Figs 3, 4). In addition, there were circular healing lesions on the palmer aspects of both hands resembling healing cigarette burns (Fig 5).

Radiographs of the skull, long bones, ribs, and pelvis were within normal limits. A coagulation screen including platelet count, prothrombin time, and partial thromboplastin time was normal.

Psychosocial History

The parent was informed of our concern regarding the multiple injuries and was asked to meet with a social worker. During this interview the following information was obtained. The father and mother had been living together for approximately 8 years and there were 2 other children, ages 7 years and 10 months, respectively. The father had been employed regularly, but was not working at the time of presentation. A chronic alcoholic, he had abused both the children and his spouse on a number of occasions. The mother appeared passive and ineffectual during the interview. She acted in an immature manner in response to family issues. Apparently the father often acts in a similar manner.

Child Protection

The social worker, physician, and dentist discussed their findings regarding the reporting of this incident and the relative degree of risk to the child. Taken into account were: the child's age; the psychosocial history of the family; the severity, number, and type of injuries; and specifically the location of the most recent injury — the head.

A decision was made to hospitalize the child with the admitting diagnosis of "unexplained injuries." The parents were notified by the physician of the decision

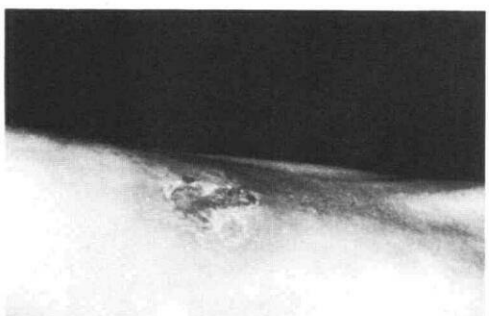
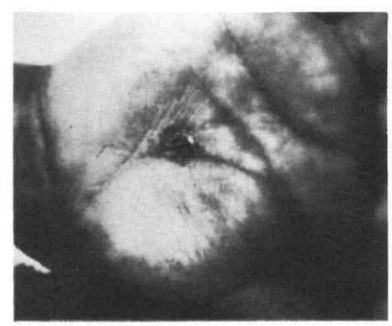


FIG 4. Patient's right arm with multiple bruise marks.

FIG 5. Palmer aspect of hand with healing cigarette burn.



to admit the patient and of the necessity of reporting the occurrence to child protective services. They were reassured that those involved would work with the family to find better ways for them to deal with their child. In addition, the need to examine the siblings was noted.

Reporting

Telephone and written reports to child protective services were made. These include:

1. Demographic information including patient and parent name and address
2. Time, day, and date of presentation
3. History, including detailed sequence of events, discovery of the injury, and the persons present at the time of injury
4. Detailed physical findings, including location, size, color and nature of each individual site
5. Results of X ray and laboratory tests
6. Conclusion stating that this incident represented nonaccidental trauma and a potential for reinjury to the child.

Hospitalization

During his 72-hr hospital admission, dental care was performed relative to the traumatic findings, supportive medical care was delivered, and developmental screening revealed deficiencies in language development. Physical examinations were performed on both siblings. These revealed no evidence of trauma and therefore the siblings were allowed to remain at home with the parents. It was noted, however, that there was mild language delay in the 7 year old and that she was somewhat immature in her interactions with adults.

The child protective social worker interviewed both parents. They refused voluntary foster placement of the 4 year old. The protective services agency therefore obtained temporary custody pending a hearing before the juvenile court and placed him in a foster home.

Legal Proceedings

Prior to the court appearance, a review of evidence and preparation of testimony were necessary for the physician, dentist, and protective services worker. A pretrial conference was indicated since this was the first appearance for the dentist before the juvenile court. All case records and medical records were reviewed and informal discussions with the county attorney allowed the medical personnel to become more familiar with issues relevant to the court hearing.

As witnesses, the physician and dentist were asked to testify on specific matters relative to this case and, at times, answer questions related to hypothetical situations regarding the child and his abuse. Questions were asked concerning the examination of the patient, circumstances relative to the examination, presence of other people at the examination, history taken from parents, and specifically the nature and extent of the injuries, their cause, and prognosis. Interpretations of X-ray and laboratory findings were discussed. Questions were asked regarding familiarity with child abuse and the "battered child syndrome."

The court found that there was a preponderance of evidence in support of the alleged abuse and therefore elected to place the child in foster care for a minimum of 6 months. During this placement, medical and dental follow-up treatment was undertaken and there was resolution of all physically traumatized areas. Frequent visits by a case worker from protective services monitored the progress of the child.

Family Therapy

In addition to the foster placement, the following treatment plan was developed for this family:

1. The mother and father were referred for weekly marital/family counseling.
2. Both parents joined the local Parents Anonymous chapter.
3. The 10-month-old sibling entered a day care center 3 afternoons per week.
4. The father was referred to Alcoholics Anonymous.
5. The family was referred to a public assistance social worker for support during periods of financial need.
6. Both the patient and his 7-year-old sibling were referred for speech and language evaluation and therapy.

Case Resolution

The initial plan included parental visitation twice weekly while their son was in foster care. There was agreement that after a 6-month period of treatment, the family's progress would be reviewed and the return of the child would be considered.

In the ensuing 6 months, the parents both had complied with their marital/family therapy appointments as well as their Parents Anonymous activities. The father had regularly attended Alcoholics Anonymous meetings for a 3-month period and gained employment in the local community. The mother stated that she and her husband were benefiting from both their psychotherapy and their Parents Anonymous experience. After case review, the protective services agency felt that it was appropriate to return the child home under continuing protective supervision by their department.

Summary

A case of child abuse which first presented at a dental clinic was presented. Patient evaluation, recognition of the problem, treatment protection reporting, legal intervention, and family counseling were discussed. The interaction of multiple disciplines and skilled professionals is necessary for positive resolution of all issues.

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Bitemark identification in child abuse cases*

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Abstract

Bitemarks in children represent child abuse until proven differently. They are rarely accidental and are good indicators of genuine child abuse.

There is a spectrum in the appearance of bitemarks throughout childhood. In infancy the bites tend to be punitive in nature and generally are located anatomically differently from bitemarks inflicted later in life. Older children reflect bitemarks which represent either assault or sexual abuse. These "tool marks" often can be separated on the basis of appearance as well as location.

Human bitemarks are identified by their shape and size. They have an elliptical or oval pattern containing tooth and arch marks. These impressions can be matched against the dentition and dental impressions of the victim and suspects.

Using tool-mark technology, comparisons are possible even in limited material. Computer enhancement of bitemark photographs increases a favorable comparison by further delineating unique characteristics of the arch and individual teeth.

The majority of child abuse patients are brought to hospital emergency rooms, pediatric clinics, or emergicenters with a history of accidental trauma supplied by the parents or adult guardian. Bitemark injuries are rarely accidental and are good indicators of genuine child abuse.[1] Where bitemark evidence exists it usually is possible to exclude all but one person as the assailant. In most cases, the person inflicting the bitemark is the person responsible for abusing the child.[2]

A wide spectrum of bitemark evidence exists within the confines of child abuse. Bitemarks found on infants tend to be in different locations than on older children or adolescents and reflect punitive measures.[2-4] Older children tend to exhibit bitemarks falling into 2 categories: assault, in which bites are inflicted in a rapid, random, enraged manner; and sexual abuse in which a well-defined bitemark is evident and frequently associated with a "suck" mark.[1,5,6] The sexual category also includes defense bitemarks, on either the victim or the assailant.

Human bitemarks are identified by their shape and size.[3,7-9] When necessary, serological techniques are available and may assist in identification. Frequently, there are sufficient dental similarities between the bitemark and the accused to exclude other suspects. With rare exception, identification is by exclusion rather than inclusion.[5,9-11] Although bitemarks rarely contain more features than those exhibited by the ante-

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