Oral bleeding: Child abuse alert

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Abstract: Physicians must be aware of histories, behaviours and physical findings of maltreated children. We report two cases of physical child abuse in which the initial symptom was oral bleeding. In both cases, the diagnosis was delayed and was made only after severe injuries were inflicted. Injuries to the oral cavity and oral bleeding of uncertain origin in infants should be considered seriously and should be carefully assessed in relation to adequacy of history to explain the mechanism of injury. When an infant has been injured and no adequate explanation is available to account for the mechanism, inflicted injury must be suspected and evaluated, so that in cases of child maltreatment, diagnosis and protection of the child from further injury can take place as early as possible.

Key words: child abuse; oral bleeding.

CASE REPORTS

Case 1

A blood spot was seen on the pillow of an otherwise healthy 9-day-old newborn boy by his mother. Physical examination was normal except for a small bleeding lesion on the hard palate. Complete blood count as well as coagulation studies were normal. During the hospitalization, the patient had one episode of hematemesis and the oral lesion healed. He was discharged to home at age 2 weeks in good health. Two weeks later he was seen by his paediatrician, who noticed swelling and tenderness of the right upper arm. Although the patient was immediately referred to the paediatric emergency department, he was only brought to the hospital by his mother the following day. A radiological bone survey revealed the following findings: (i) a displaced fracture of the shaft of the right humerus with indistinct margins and soft tissue swelling suggesting a recent injury; and (ii) fractures of the 10th and 11th right ribs as well as the 10th left rib with moderate callus formation estimated to be 2–3 weeks old; and (iii) bilateral cranial fractures of the parietal bones. Computed tomography of the head showed the parietal fractures as well as subdural haemorrhages and symmetric frontal leukoencephalomalacia. The suspected physical abuse was admitted by the father.

Case 2

A 4-month-old male infant presented with excoriating skin lesions on the thorax since 1 week. His mother noticed a few drops of blood in his mouth at the age of 2 months and again at the age of 3 months. She herself suffered from prolonged bleeding during menstruation and post-partum. Physical examination of the infant revealed bruises of different colours, as well as excoriating erythematous skin lesions. No abnormality was found in the mouth. Complete blood count was normal as well as prothrombin time and activated partial thromboplastin time. The bleeding time was prolonged at 15 min (normal <8 min). As the levels of coagulation factor VIII and von Willebrand factor were normal, a platelet dysfunction was suspected. The finding of bruises of different colours, thus possibly of different ages, on a 4-month-old infant, for which no explanation could be provided by the mother, raised the possibility of child maltreatment. However, when the prolonged bleeding time was found, it was assumed that it explained the multiple bruises. At the age of 8 months, the boy was brought to the paediatric emergency department. He had nasal bleeding as well as multiple bruises on the scalp and face (Fig. 1). Radiological bone survey and computed tomography of the head were normal. The suspected physical abuse was admitted by the father.
DISCUSSION

In the two infants presented, the first symptom was bleeding from the mouth. After more injuries were inflicted, physical abuse was diagnosed. It is feasible that the unexplained bleeding was caused by inflicted trauma as well. In the case 2, a prolonged bleeding time, possibly due to congenital platelet dysfunction, obscured the diagnosis. Child abuse should be diagnosed as early as possible in order to prevent further maltreatment. Notwithstanding the fact that oral and/or nasal bleeding may be rare manifestations of child maltreatment, it should be considered when adequate explanation for the injury is lacking. Child maltreatment is relatively common compared to most other chronic illnesses and has severe consequences if missed.

Oral and dental features appear in physical and sexual abuse of children as well as in child neglect. Oral manifestations of physical abuse include: contusions; lacerations (e.g. of the frenulum); fractured, displaced or avulsed teeth; bone fractures; burns; and other injuries. Injury is most commonly caused by blunt trauma, scalding liquids or caustic substances. In a recent study examining the profile of oro-facial injuries in child physical abuse, it was found that 67% of the 300 reviewed cases had injuries to the head and neck and, of these, 11% to the mouth. The distribution of mouth injuries was: 54% lips, 15% oral mucosa, 12% teeth, 12% gingiva and 7% tongue. In a study using covert video recordings, 11 out of 38 patients who had suffered from life-threatening child abuse had bleeding from the nose and/or mouth. None of the 46 control children (with apparent life-threatening events proven to be attributable to a natural medical cause) had such bleeding. In infants presenting with an apparent life-threatening event, the presence of bleeding from the nose and/or mouth, or a family history of sudden death in childhood, should suggest investigation of possible abuse.

Details of the cases in the present case report suggest that physical abuse cases, not only life-threatening child abuse, can present with bleeding from the mouth, even when no lesion is seen in the oral cavity. The postulated injury inflicted on the oral mucosa that caused the bleeding may be small and not visible, or may heal by the time of presentation. Physicians caring for children should be aware of oral and dental aspects of child abuse and neglect and should consult paediatric dentists in unclear suspected cases. If patients have bleeding from the mouth and/or nose without a reasonable explanation, physical abuse should be considered, especially when injuries are multiple, are in different stages of healing, are inappropriate for the child’s stage of development, or in cases of discrepant history. Moreover, when obtaining the history in cases of suspected child maltreatment, the caregiver should be explicitly asked about episodes of bleeding from the mouth occurring currently or in the past.

Other causes of oral bleeding include: accidental trauma, bleeding diathesis, gingivitis and tumors in the upper aero-digestive tract, especially hemangiomas. Accidental trauma often results from foreign bodies placed in the mouth, from falls or from a bite into soft tissue.

Case 2 of the present case report shows that patients with bleeding diathesis can also suffer from physical abuse.

CONCLUSION

Oral bleeding in infancy should be considered seriously. When no adequate explanation is available, inflicted trauma must be suspected and evaluated so that diagnosis and protection of the child from further injury will take place as early as possible.

REFERENCES
