Horse Bite Injury to the Lip: A Case Report

La blessure par morsure chevaline à la lèvre - un rapport de cas

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Abstract

Background: Bite injuries to the face are commonly caused by pets and humans. Bite injury by horse is uncommon. A case of horse bite injury and its management is reported.

Patient and Method: A 12-year-old boy sustained a full-thickness avulsion injury to the lower lip following a bite by a horse. The lip was reconstructed at Komfo Anokye Teaching Hospital, Kumasi, Ghana, within 48 hours of injury under general anaesthesia , using a local flap. The patient had a full course of Amoxicillin and metronidazole, post-operatively.

Results: Healing was uneventful and both the functional and cosmetic outcomes were satisfactory.

Conclusion: Horse bite is a rare but a potentially serious injury, especially following provocation of the animal. Children should be properly supervised when they are handling the animal.

Keywords: Animal bite; horse bite; human bite; local flaps

Resume

Arrière-plan: Les blessures dues à la morsure au visage sont communément causées par les animaux et les humains. La blessure par morsure chevaline est rare. Nous rapportons un cas de morsure chevaline et sa gestion. ***Le patient et la méthode***: Après être mordu par un cheval, un garçon âgé de 12 ans a reçu une grosse déchirure à la lèvre inférieure. Dans les 48 heures suivant la blessure, la lèvre a été reconstruite au Centre Hospitalier de Komfo Anokye, Kumasi, Ghana, sous l'anesthésie générale, en utilisant un morceau de peau local. Après la chirurgie, le patient a reçu un traitement complet à l'amoxicillin et à la métronidazole. ***Résultats:*** La guérison a été calme et les résultats fonctionnels et esthétiques ont été satisfaisants. ***Conclusion:*** La morsure chevaline est rare mais constitue une blessure potentiellement sérieuse, surtout suite à la provocation de l'animal. Les enfants devraient être surveillés correctement quand ils manient l'animal. ***Mots-clés:*** morsure animalière; morsure chevaline; morsure humaine; morceaux de peau locaux

Introduction

Bite injuries may follow man-to-man interpersonal violence, or attacks by animals[1-2]. Dahl[2] found that bites from dogs and cats accounted for 93% of bites due to animals. These injuries may be complicated by infection by a complex microbiologic mix which is sensitive to a combination of a ß-lactam antibiotic and a ß-lactamase inhibitor[3]. Organisms like E. coli, Streptococcus, Enterococcus, Staphylococcus epiderdimis, and Proteus species have been isolated from animal bite wounds[4]. The management of bite injuries should aim at preventing infections like tetanus, although prophylactic use of antibiotics is questionable[2]. Immediate or delayed surgical treatment can be rewarding. In either case there is the need for thorough wound debridement and excision of necrotic tissue. Where there is tissue avulsion various techniques for reconstruction may be employed including re-implantation using microvascular techniques[5]. A case of horse bite injury to the lower lip and its management using a local flap technique is reported.

Case Report

A 12-year old boy was referred to the Maxillofacial Unit of the Komfo Anokye Teaching Hospital, Ghana, from a private clinic following bite injury he sustained when he was attacked by a horse while feeding the animal. According to his mother the boy had been provoking the animal by repeatedly withdrawing the feed whenever the horse reached out for a bite. When the boy attempted this ploy one more time, the horse attacked him and bit off a piece of his lower lip. He was taken to a nearby clinic where the wound was cleaned and dressed. He had anti-tetanus prophylaxis, amoxicillin and ibuprofen and subsequently referred to the Maxillofacial Unit, Komfo Anokye Teaching

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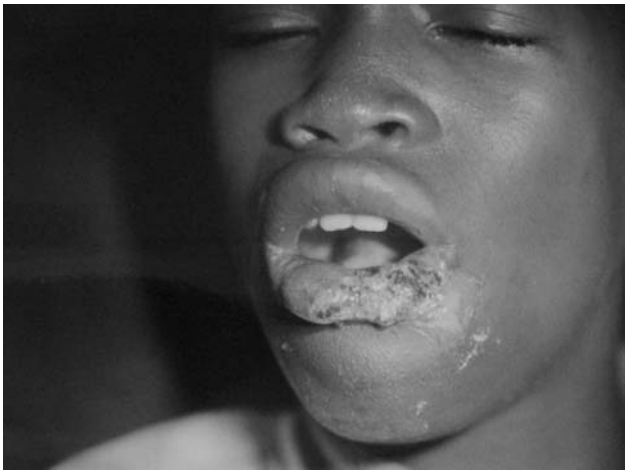


Fig.1: Injury from horse bite to the lower lip



Fig.2: Outcome of the repair of the injury in the same patient

Hospital where he presented more than 24 hours later.

Examination showed a well-looking boy. There was a full thickness avulsion wound with ragged edges involving the upper third of the left side of the lower lip (Fig. 1). He had the repair of the defect the same day of presenting to our unit.

Under general anaesthesia, the wound was thoroughly cleaned and all non-viable tissues were excised. Full-thickness stepwise excision of the lower lip[6] was carried out and the lateral flaps advanced and sutured in layers. Postoperatively, the antibiotics and analgesics were continued for a few more days. Wound healing was uneventful and skin sutures were removed on the seventh day after operation. The final result was satisfactory both functionally and cosmetically (Fig.2).

Discussion

Unlike bite injuries caused by dogs, cats and humans[2], camel[7], horses bite injuries are rare[5,8]. The case under consideration is an addition to the existing literature on horse bite injuries to the lip of children. The injury was sustained as a result of the provocation of a hungry horse. Anecdotal evidence suggests that animals attack humans when they are subjected to conditions which create discomfort, frustration, pain and fear in them. It is therefore pertinent that children are properly supervised at all times when they are handling animals.

Even though repair of the wound took place more than 24 hours after the injury, healing was uneventful. This confirms the finding by Wolff that infection rates of animal bite wounds are low[4]. The use of amoxicillin, a â-lactam antibiotic probably helped to prevent infection of the wound. Similar observations had also been reported on human bites[1]. Local flaps as used in this case or microvascular techniques[5] are helpful in achieving wound closure where tissue loss is minimal. Thorough surgical debridement and the rich blood supply to the facial region permit good healing even when repair is delayed. Attempt must therefore be made to achieve primary repair of soft tissue defects following bite injuries even after a delayed presentation.

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