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General Surgery

# A STUDY OF MANAGEMENT OF COMPLEX DOG BITE WOUND OVER FACE

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**ABSTRACT** **INTRODUCTION:** Dog bites are common and can affect victims of different ages, from children to the elderly. Injuries are usually located in different body regions, including head and face. The treatment of choice for injuries is the suture of the lesion, accompanied by antibiotic therapy and tetanus and anti-rabies vaccination.

**PRESENTATION OF CASE:** An 45-year-old female black patient was admitted to the Surgery andMaxillo-Facial Traumatology Service, on an urgent basis, victim of domestic animal aggression (dog biting). The patient had multiple and extensive lesions on the face, trauma with laceration.

**DISCUSSION:** Smaller children are especially vulnerable to injuries in the craniofacial region due their low stature, propensity to crawl/play on the ground and exploratory behavior. The primary treatment of bites is by means of direct suture, grafting or local flaps, depending on the type of wound and the surgeon's decision, regardless of time elapsed from the attack.

**CONCLUSION:** This case shows a case of a child patient victim of animal bite, with lesions limited to the region of the face. The patient was followed up for a month and showed good wound healing without any complications.

**KEYWORDS :** antirabies vaccination,grafting

## INTRODUCTION

Injuries are a major cause of morbidity worldwide, especially in childhood, in which attacks by animals stand out, since they not only transmit diseases, but also show high treatment costs. Bite wounds are frequently located on the face; injuries inflicted by dogs are most common , especially in children and most dogs are familiar with their victims . The most affected body region varies according to the age group of the victim, so that while adult victims are most affected in the body, children are most affected in the head region. Other authors point out that the regions most affected by dog bites are hands, followed by lower extremities, upper extremities, face and buttocks. A complete clinical examination is essential, associated with a detailed examination of the injury under general anesthesia, as appropriate. The treatment of lesions caused by dog bites is done by cleaning, debridement and primary closure of the injury, rabies and tetanus control and antibiotic prophylaxis. In this context, the aim of this work was to describe an interesting case in which a 45 year old female presented with multiple soft-tissue lacerations to the face, all sustained from a dog-bite attack.

## CASE

- A 45 yr female presented to cha with history of dog bite 24hrs back on face. The patient complain of severe pain over face and pus discharge from wound.
- wound involved left side of face including left cheek and extending upto nose on left side.
- wound was sutured by chromic catgut in private hospital 3-4hrs after bite.
- On removal of chromic catgut suture the wound was found to be about 12cm x 2cm, draining pus with slough at the base of the wound.at the nasal region skin and sc tissue was found to be necrosed.
- PT was given tetanus vaccination sngle dose and inj rabipur 0.5 cc im in private hospital 3-4 hrs after the bite.

**Image 1**

## MANAGEMENT

- Post exposure rabies prophylaxis: tt pasive immunisation in dose of 20u/kg and rabies passive immunisation human species about 20iu/kg.
- SC catgut sutures were removed from wound. Pus was drained and wound was copiously irrigated with betadine diluted in saline.
- Slough at the base of wound was removed by debridement. Necrotic skin and sc was excised. Dressing kept using hydrogel daily.
- After 7days wound showed healthy base with healthy granulation tissue.
- Wound was closed in 2 layers in ot under la.
- SC closed by vicryl 3-0 simple interuppted suture and skin by epimide 4-0 simple interrupted suture.
- Supportive iv antibiotic with analgesics were given.
- On 7th day skin sutures were removed from facial wound with no gaping, no sign of infection and no necrosis at suture line.

**Image2**

## DISCUSSION

- MC complication of dog bite is infection due to contamination of wound by gram +ve and gram –ve microorganism in saliva.
- Urgent attention required with administration of antibiotics,wound toilet and surgical debridement.
- Delayed repair is traditional approach for pt who approach late.
- Some prefer primary repair after surgical debridement and wound toilet with antiboitc prophylaxis.
- In our case wound was severely contaminated with necrotic foci.
- Wound was managed by urgent debridement and supportive measures and delayed closure due to wound infection.
- Active and passive immunisation were given.

## CONCLUSION

Thus the management of complex facial dog bite wounds is thorough exploration and a proper assessment of the wound , removal of dead and necrotic tissue and irrigation of the wound by mild anntiseptics and delayed primary closure.

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