

## RECONSTRUCTION OF TRAUMATISED MAXILLO-FACIAL REGION IN A BUFFALO HEIFER

R. N. CHAUDHARY\*, SANDEEP POTLIYA, A. K. PANDEY and N. S. BUGALIA  
Teaching Veterinary Clinical Complex, College of Veterinary Sciences  
Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar-125 004

### SUMMARY

The present paper describes a case of heavily traumatized maxillo facial region of buffalo heifer which was reconstructed to maintain patent airway through nasal passages. The animal recovered with a complication of extra opening on the face but able to survive.

**Key words:** Maxilla, buffalo heifer

Maxillary fractures are rare in buffalo and cattle. However, the incidence of jaw fractures is 1.5 - 3% of all fractures in dogs and 15-23% of all fractures in cats with vehicular trauma being the most common cause (Owen *et al.*, 2004; Piermattei *et al.*, 2006). Maxillary fractures represent no less than a “battlefield” of strongly held beliefs when it comes to appropriate treatment (Harasen, 2008).

A two year old buffalo heifer was presented with heavily traumatized face. As reported, the animal was intentionally traumatized on the face by multiple strokes with some very sharp object leading to multiple compound fractures with sharp edges of maxillo-facial bone of the right side and nasal bones in the center of the face. The nasal cavity and right maxillary sinus were exposed and the bones forming these sinuses were cut into many pieces leading to deviation of upper jaw in relation to lower jaw. The air was being sucked through the cut ends instead of nostrils. On examination, the left side of the face was intact. The rectal temperature, respiration rate and pulse rate were within normal range. The animal was sedated with Xylazine Hcl @ 0.05 mg/kg b.wt. intravenously and restrained. The wound was cleaned and the nasal passage was cleared off the debris and blood clot. The bone pieces which were detached from subcutaneous tissue but hanging with small attachments to skin were removed and the remaining tissue was repaired with chromic catgut (#1) and silk

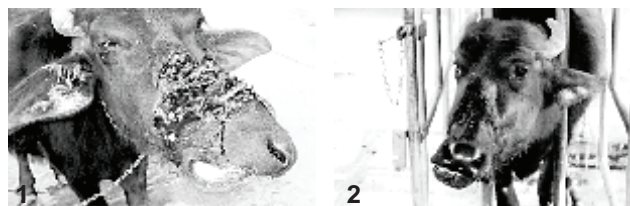


Fig 1. Clinical presentation of trauma to maxillo-facial region.

Fig 2. Post reconstruction maxillo-facial trauma.

(#2). After completion of suturing (Fig. 2), the up and down movement of the skin of wound area with each expiration and inspiration was observed due to lack of bony support underneath. One suture in the nasal area was opened to reduce the movement of repaired area and stress. Partial exchange of gases started through this opening along with nostrils. Post operatively, the animal was given ceftriaxone, ketprofen and vitamins in recommended doses. Regular dressing of the wound with 5% povidone iodine led to its healing in three weeks and the animal survived with an extra opening in upper nasal cavity.

### REFERENCES

- Harasen, G. (2008). Maxillary and mandibular fractures. *Canadian Vet. J.* 49: 819-820.
- Owen, M.R., Langley Hobbs, S.J., Moores, A.P., Bennett, D. and Carmichael, S. (2004). Mandibular fracture repair in dogs and cats using epoxy resin and acrylic external skeletal fixation. *Vet. Comp. Orthop. Traumatol.* 4:189-197.
- Piermattei, D.L., Flo, G.L. and DeCamp, C.E. (2006). Handbook of Small Animal Orthopedics and Fracture Repair. 4. Saunders/Elsevier, St. Louis, Missouri.

\*Corresponding author: mncvetster@gmail.com