Fracture of mandible in camel

MJFCVAS

Dr. Kuldeep

INTRODUCTION

- Fracture of mandible is more common in male camel during rutt season.
- Most common site is across the first premolar quite cranial or caudal to this point in inter-dental space.
- Usually fractures are bilateral compound and transverse.
- Fracture of mandible symphysis, vertical ramus and avulsion type are rare in camels.
- The mandibular fracture can be successfully immobilized by standard interdental wiring technique using 1.0mm stainless steel, copper or silver wire (Gahlot et al 1984;Gahlot and chouhan 1992).
- Whereas atypical fracture require other technique such as bone plating(kumar et al., 1979).



Fig. 1. Avulsion fracture of mandible of a camel. The oblique fracture line is visible running caudally from the middle of central incisor to the mid of right side inter dental space

SURGICAL TECHNIQUE

- Restrain the animal in sternal recumbency and sedate with xylazine hydrochloride and ketamine hydrochloride (0.4mg per kg bwt I/v).
- Clean the fracture site with light potassium permagnate solution first, than necrotic tissue and small bone fragment debrided as needed.
- Before reduction of fracture instill the antibiotic powder in the gap.
- Twist the both ends of wire together.
- Allow to remain it in place for 12 weeks postoperatively.

• Reduce the fracture with stainless steel wire of 0.7mm diameter directly over the mucosa from behind the lateral incisor taken in oblique direction on opposite side behind the canine tooth and than take back on the other side behind the right canine passed over the dorsal surface of jaw in oblique direction anterior to left canine in a figure of eight pattern instead of passing both free ends through the skin as described by symphyseal fracture repair in dogs (Coughlan and miller 1998;Tiwari et al.,2012)



Fig. 2. Circumferential wiring in a figure of 8 pattern applied directly over the mucosa of lower jaw of the camel with avulsion fracture of mandible of a camel

POST OPERATIVE CARE

- Flush oral cavity daily by standard aqueous solution of potassium permanganate for 5days.
- Inject streptopenicillin I/m at dose rate 1ml/20kg for 1week.
- Phenylbutazone at dose rate of 1ml /44kg for 5 days.
- Offer the animal soft food (wheat gruel mix with seedless dates) for 2 weeks and than gradually shift to semisolid and normal food.
- Remove the wire after there is evidence of fracture healing approx. 2months

