

SURGICAL MANAGEMENT OF BILATERAL MANDIBULAR FRACTURE IN A DOG

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Fractures of the mandible are very common in dogs and cats (Latimer and Kemp, 1977). Wire fixation is one of the most common method of treating mandibular fractures (Chaffee, 1978). A case of bilateral mandibular fracture in a dog and its successful surgical management is reported in this paper.

History and Symptoms

A five year old German Shepherd dog met with a car accident and was reported to be having severe head injuries. On examination,



there was bilateral oblique fracture of the horizontal rami of mandibles. The lower jaw was hanging down and



the dog was not able to close the mouth (Fig. 1&2). Mucous membrane and the muscles of the lower jaw were torn and there was profuse

bleeding. The animal was in comatose condition.

Surgical Management

The condition of the dog was stabilized by administering intravenous fluids (Ringer Lactate-200ml., Dextrose Normal Saline- 200ml.) and B-Complex vitamins. Bleeding was controlled by pressure bandage.

The animal was premedicated by administering xylazine hydrochloride (1mg/ kg) intramuscularly and

atropine sulphate (0.045mg/kg) subcutaneously. General anaesthesia was induced and maintained by Ketamine hydrochloride (10mg/kg) intravenously.

The animal was placed in left lateral recumbency. The oral cavity was kept open and the wound was cleaned using povidone iodine solution.

The fractured ends of both the horizontal rami of mandibles were brought into apposition by circlage wiring using 18-gauge stainless steel wires. An electric drill was used for making holes for the passage of wires. The wires were tightened to make anterior and posterior fractured ends into apposition. Muscles were sutured using 1/0 chromic catgut and skin was apposed by 1/0 silk.

Post-operative care

Ceftriaxone sodium (1g) and Ketoprofen hydrochloride (50mg) were administered intravenously for five days. Intravenous fluids and B-Complex vitamins were given for seven days. Oral cavity was cleaned using hypertonic saline and dressed with povidone iodine solution. An external muzzle was applied for ten days for preventing movement of the jaws. Skin sutures were removed on the tenth day. The dog made uneventful recovery.



Results and Discussion

A case of bilateral mandibular fracture in a dog and its successful surgical management is discussed in this paper. Circlage wiring using 18-gauge stainless steel wires along with muzzling was found to be suitable for proper immobilization.