Nylon loop fixation of mandibular symphysis fracture in a cat

Touraj Ahmadioun1, Zahra Mousavi Pourgohar*2, Omid Fakhri2, Fayaz Mirasi3

1 Small Animal Practitioner, Dr. Ahmadioun Pet Clinic, Tabriz, Iran
2 DVM Graduate, Faculty of Veterinary Medicine, University of Tabriz, Tabriz, Iran
3 DVM Student, Faculty of Veterinary Medicine, University of Tabriz, Tabriz, Iran

Email: z.mousavi.pg@gmail.com

Case Description
A young mixed breed unconscious cat with a history of car trauma and obvious external bleeding in oral cavity was referred to the clinic.

Clinical Findings
The patient was mildly dehydrated (4%), with normal CBC and without pyrexia. The cat had inappetance and nasopharyngeal hemorrhage. Physical examinations declared no sign of lacerations in hard or soft palates. Further examinations showed asymmetric positioning of teeth and mandible. Simple skull x-ray demonstrated mandibular symphysis simple fracture.

Treatment and Outcome
General condition of the patient was stabilized and rehydration was performed. In this case, due to the type of fracture nylon loop fixation through submandibular approach was preferred. A 0.5 cm incision was made beneath the mandibular symphysis with special care given to hemostasis. Oral cavity kept open during the surgery using a mouth gag then a nylon suture (size: 2/0) was placed in the region through labial surface of gingiva at both sides with guidance through the skin incision. In order to strengthen the fixation a loop was added to the suture around canine teeth at both sides. No sutures were needed to close the skin incision and it was healed after 2 days. Intravascular fluid therapy was continued for 2 days post-surgery. The patient was fed with bland diet during convalescence period. Fracture healing process was checked by simple x-ray study 20 days after surgery which showed thorough recovery of the bone and the loop was removed.

Clinical Relevance
Fractures are considered as the second most prominent urgent conditions preceded by diaphragmatic rupture following severe traumas. Therefore, maxillofacial fractures are among the dangerous conditions which can lead to gastrointestinal and respiratory system inflammations and infections if neglected and left untreated. Inappetance, lethargy and dehydration caused by maxillofacial fractures adds to the necessity of performing surgical fixations.

Keywords
Nylon loop fixation, mandibular symphysis fracture

References