

Surgical Repair of Mandibular Fractures in Two Large Breed Dogs using Plate, Screw and Wire

**Jongbo Shim, Jinuk Park, Kirae Cho, Joong-Hyun Kim,
Seok Hwa Choi and Gonhyung Kim***

*Department of Veterinary Surgery, College of Veterinary Medicine
Chungbuk National University*

Animals with mandibular fractures may salivate excessively, exhibit pain on opening of the mouth, crepitation can be heard and malocclusion can be shown. Intraoral open fractures, symphyseal luxation and dental stability should be examined carefully. Following two mandibular fracture cases show the effect of surgical repair using plate, screw and wire. First case is 3 year old, male, 40.5 kg, mixed breed dog presented with severe pain and not using jaws to Veterinary Medical Center of Chungbuk National University. Intraoral open fractures in both mandibles were detected in physical examination and the fractures on caudal forth of both mandibular shaft were diagnosed in radiographic examination. As surgical repair, interfragmentary wires were applied on the right mandible and interfragmentary wires with plate were applied on the left mandible and then intra-oral mucosa were sutured. Second case is 6 year old, male, 24 kg mixed breed dog presented due to trauma by boar during hunting. Fracture of rostral portion near canine teeth of left mandibular shaft and luxation of mandibular symphysis were detected. Fracture and luxation were repaired by interfragmentary wires. In the first case, the wire applied on right mandible became loose and additional wire were placed. Left mandible stabilized by plate and wire showed normal bone healing. Both cases returned to normal without malocclusion of canine and incise teeth after surgery. Bone cement applied as a additional fixator to the missing tooth was estimated not helpful in regeneration of periosteum and gingiva of this case. Mandibular fractures could be stabilized by plate and wire combination to neutralize bending force.

* Corresponding author: ghkim@cbu.ac.kr