

## Repair of Mandibular non-union Fracture with Porcine Cancellous Bone graft in a dog

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A 7-year-old 4.2kg, male Yorkshire Terrier dog with a history of anorexia and inability of mastication due to the failure of previous mandibular fracture surgeries was referred to Animal Medical Center, Chonbuk National University. Plain radiography was performed to localize the lesion. Additionally, computed tomography(CT) was performed to identify anatomical structures in detail. On the plain radiograph and 3-Dimensional CT images postprocessed by a commercially available software, the left mandibular fracture behind the 4th premolar was found. At the same time, we could notify delayed union status in this lesion. The dog was anesthetized and prepared for aseptic surgery. Under general anesthesia, we applied porcine cancellous bone graft with bone plate to repair delayed union fracture on the bone defect lesion. At 4 months after the operation, we could observe bone remodeling in the bone defect lesion. The patient showed a distinctive improvement in terms of mastication such as food ingestion. In the case of a dog with mandibular non-union fracture, application of porcine cancellous bone graft with bone plate can be one of valuable and useful ways to acquire a sufficient bone remodeling.

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