



Oral Presentation

Effect of Platelet-Rich Fibrin (PRF) in Non-Union Treatment

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Introduction: Non-union is a condition that affects the patients quality of life, imposes a financial burden on the owner, and is difficult to manage for the operator. Non-union can be caused by many reasons and only be treated operatively. PRF naturally contains growth factors that help tissue regeneration, therefore has much potential in surgical fields and is applied in humans but is not yet applied in non-union cases in cats and dogs. **Material and Methods:** In the cases of our study, 4 cats and 2 dogs were brought to the IUC Veterinary Faculty Surgery Department Clinic, who were unable to use their damaged legs, with a clear and marked nonunion of the fracture line in their radiographs. Case1;7-year-old male dog with antebrachium fracture had plate and intramedullary (IM) pin osteosynthesis and there was no healing for 2 months. Case2;7-year-old female cat with femur fracture had Schanz-pin osteosynthesis and no healing was observed for 3 months. Case3;10-month-old female cat with a femur fracture had an IM-pin osteosynthesis and no healing was observed for 2 months. Case4;1-year-old male cat with an open tibia fracture external fixation was applied and no healing was observed for 3 months. Case5;1-year-old female cat with antebrachium fracture had plate and IM-pin osteosynthesis and was no healing for 3 months. Case6;10-month-old male dog with antebrachium fracture had an IM-pin osteosynthesis and there was no healing in the patient for 2 months. Under general anesthesia the sequestrant tissue was removed, drainage was provided. PRF was placed at the area. Only in case6, osteosynthesis material was removed during PRF application and plate osteosynthesis was performed, the bandage was applied for one month. **Results:** On the 15th-day cases 1,2,3,4 and 5 were started using the affected legs. Radiographic healing was observed in all cases and the fracture line was completely closed. **Conclusion:** It was concluded that bone union was achieved in non-union cases, the extremities of the patients regained their former function, and PRF is an effective biomaterial in bone healing.

Keywords: fracture, regenerative medicine, bone healing

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