

## A Radiographic Survey of Eggshell Powder Effect on Tibial Bone Defect Repair Tested in Dog

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**Abstract :** The skeletal system injuries are of major importance. In addition, it is recommended to use materials for hard tissue repair in open or closed fractures. It is important to use complex minerals with a beneficial effect on hard tissue repair, stimulating cell growth in the bone. Materials that could help avoid bone fracture inflammatory reaction and speed up bone fracture repair are of utmost importance in the treatment of bone fractures. Similar to minerals, the inner eggshell membrane consists of carbohydrates, lipids, proteins with the high pH, high calcium absorptive capacity and with faster bone fracture repair ability. In the present radiographic survey, eggshell-derived bone graft substitutes were used for bone defect repair in 8 dog tibia, measuring bone density on the day of implant placement and 30 and 60 days after placement. In fact, the result of this study shows the difference in bone growth and misshapen bones between treatment and control sites. Cell growth was adequate in treatment sites and misshapen bones were less frequent here than in control sites.

**Keywords :** bone repair, eggshell powder, implant, radiography

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