

Long Bone Fracture in 70 Dogs

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Purpose: To report the signalment, history, clinical features, outcomes, and postoperative complications of dogs with long bone fracture.

Materials and Methods: Medical records from Veterinary Medical Teaching Hospital of Konkuk University from 2002 to 2007 were retrospectively reviewed in 70 dogs with long bone fracture. Patients follow-up was completed by only medical record.

Results: Of 70 dogs, 42 were males and 28 females. Mean age was 20 months, mostly between 2 and 24 months (80%). Mean weight was 8.4 kg, mostly less than 10 kg (66%). Twenty eight breeds were included and the most common breed was Maltese (13%), followed by Yorkshire Terrier (10%). The causes of long bone fracture were mainly falling (44%) and hit by car (30%). In 77 fractures of 70 dogs, there were 32% radius and ulnar fracture, 32% femoral fracture, 19% tibia and fibula fracture, and 15% humeral fracture. Fracture lines were located at diaphysis (61%), metaphysis and epiphysis (31%), and physis (9%). Surgical treatment (internal fixation using open reduction pattern) and light-weight external coaptation (with or without closed reduction pattern) were performed in 47 fractures (61%) and eight fractures (10%), respectively. Six femoral head fractures were treated using femoral head and neck osteotomy. Four fractures were conservatively managed with medication, physical therapy, and bandage. Thirteen fractures were not treated. In 55 fractures repaired by surgical treatment and coaptation, there were completely union (33), non-union or malunion (5), euthanasia (2), death during surgery (1), and not follow-up (14). The complications included implant migration and deformation (30%), exudates and incision dehiscence (10%), skin injury (10%), joint arthrodesis (5%), and re-fracture (5%).

Conclusion: This report suggests that long bone fracture often occurs in young adult small breed dogs. In addition, this report provides veterinarians with general information on population data, clinical outcomes, and prognosis in dogs with long bone fracture.

Keywords: long bone fracture, dog

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