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Radiographic evaluation of bone disorders in referred dogs to Veterinary Hospital of Shahid Chamran University of Ahvaz

Abdolvahed Moarabi[1]*, Ali Reza Ghadiri[2], Bahman Mosallanejad[2] and Mojdeh Koochak[3]

[1] Associate Professor, Department of Clinical Sciences, Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz, Ahvaz, Iran
[2] Professor, Department of Clinical Sciences, Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz, Ahvaz, Iran
[3] DVM Graduated from Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz, Ahvaz, Iran

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Abstract

Skeletal disorders are included in companion animals relatively significant percentage between referred cases to the Hospital or Clinic in every region. The major skeletal problems have been reported among growing young dogs and large breeds; while small breed dogs are prone to some bone diseases. Lack of balanced nutrition (especially for calcium and phosphorus) is one of the effective factors in the arising of bone disorders. The aim of the present study was to determine the incidence and types of bone defects such as fractures, infections, neoplasia and other skeletal acquired complications in the limb organs, head and vertebral column. The present survey was done during eleven years (2004 to 2014), based on the prepared radiographs in Veterinary Hospital of Shahid Chamran University of Ahvaz; in the following, factors such as age, gender, breed and location were detected for their relationship with bone complications. In this study, bone disorders were detected such as fractures, osteomyelitis and osteoarthritis, neoplasias, dislocations in dogs and other complications like panosteitis, osteochondrosis and osteodystrophy in young animals. The results are presented as descriptive statistics. A total of 4355 referred cases to Radiology Department, 1054 cases (24.20%) were related to dogs. Out of these, 425 cases (40.32%) had skeletal disorders, out of which 46.59% and 53.41% were related to large and small breeds respectively. Skeletal disorders included fractures, luxations and other complications. The most important of these cases were radial fracture (26.71%), femur (28.34%), tibia (22.46%) and ulna (27.95%). The age of the studied animal, were in the range of two months to nine years-old. In term of gender, 62.35% of the dogs were male and 37.65% female. No significant difference was seen for age between mature (51.29%) and immature (48.71%), gender, location and breeds (large and small) statistically. In conclusion, the highest incidence of skeletal disorders was femural (28.34%) and ulna (27.95%) fractures, respectively. The obtained results showed that radiography is a valuable method to recognize skeletal disorders and the detection of the frequency in dogs.

Key words: Radiography, Bone disorders, Fracture, Dog, Ahvaz

* **Corresponding Author**: Abdolvahed Moarabi, Associate Professor, Department of Clinical Sciences, Faculty of Veterinary Medicine, Shahid Chamran University of Ahvaz, Ahvaz, Iran
E-mail: a.moarabi@scu.ac.ir

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