Summary of the DVM thesis No 12512, Faculty of Veterinary Medicine, Urmia University.
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Summary

Sheeps are ruminant mammals that were domesticated by humans over thousands of years ago to produce milk, meat and wool. The motor limbs of sheep are regularly exposed to trauma and infection and, therefore, they receive more attention from veterinarians. Radiography is always considered as a useful diagnostic method in bone and joint diseases that cannot be diagnosed by clinical examination. However, there are few standard reference images of normal radiographic anatomy of sheep available and they are not enough to interpret the images of a sick animal. For this reason, the aim of this study was to provide basic images of the normal radiological anatomy of the hindlimb of sheep, for the use of surgeons and researchers in the field of veterinary medicine. In this study, five healthy adult Ghezel sheep older than one year were selected. After confirming the health of the sheep through clinical examination and a complete blood count (CBC) test, radiological images were taken with mediolateral, craniocaudal and caudocranial views of their right hindlimb. For imaging, the hindlimb was divided into six regions: pelvic, thigh, stifle, leg, tarsus, metatarsus and digits. To prepare radiological images with a caudocranial view from stifle to digits, a horizontal radiation method was used. Finally, the resulting images were compared with healthy bones and anatomical characteristics were determined on the schematic drawings of radiographs. Normal radiographs, schematic drawings and images of bones and joints of the hindlimb were presented as standard radiological images of sheep's hindlimb. The obtained normal images can be used as a radiology atlas of the hindlimbs of sheep in veterinary centers.

Keywords: Hindlimb, Radiography, Radiographic anatomy, Sheep.