THE USE OF COMPUTED TOMOGRAPHY IN THE DIAGNOSIS OF TRAUMATIC ACETABULAR FRACTURES IN A COLT

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Pelvic fractures are uncommon in horses even if a predisposition in female horses less than 2 years old is reported in literature. Fractures involving the acetabulum are related to a trauma, often a fall. A definitive diagnosis can be reached by standing radiography, ultrasonography, computed tomography (CT), scintigraphy and diagnostic arthroscopy. This case report describes the radiographic and CT findings in a colt with an acetabular fracture. A five month old Barockpinto colt was referred for an acute severe lameness of the left hindlimb of 3 weeks of duration. The colt was treated by the referring veterinary surgeon with phenylbutazone and box rest for one week with a mild improvement of the lameness. At presentation , the colt showed good body condition and clinical parameters were in normal range. A moderate swelling on the left coxofemoral region was noted. The colt was lame at walk and the abduction of the limb induced a moderate pain. The colt was sedated with alpha2-agonist and latero-lateral and ventro-dorsal radiographic obique views of the hip were taken with the horse in standing position The colt underwent CT of the pelvis in dorsal recumbency, under general anesthesia. Radiographic examination revealed a left coxo-femoral diastasis, irregular margins of the acetabulum associated with radiolucent areas and subchondral sclerosis of the fovea capitis. Computed tomography findings consisted in multiple fractures involving the dorsal acetabular margin in association with dorso-cranio-lateral dislocation of the femoral head. In proximity of the caudo-ventral aspect of the acetabular fossa were present several small mineralized fragments. Moderate sclerosis was seen in the fovea capitis and a mild osteopenia of the left femoral head. Despite the radiographic views allowed to recognize the presence of a femoral head luxation and irregularities of the acetabular margings, only CT images revealed the presence of multiple fractures along the acetabular rim improving the prognostic value for the patient. Compared with radiography in dorsal recumbency with the limbs in a frog-legged posture, extended positioning of hindlimbs used fot the CT acquisition, induced less stress on the fracture3 In conclusion, on the basis of our experinece and in accordance with other studies, CT examination provides more valuable information than radiographs in the diagnosis of the coxo-femoral joint disease.

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