AN UNUSUAL CASE OF HIP DYSPLASIA IN A GRADED MURRAH CALF

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ABSTRACT

A case of hip dysplasia which was not well documented in buffaloes, has been described in this paper. The acetabulum was severely malformed with comparatively small head of femur and larger greater trochanters. Examination of the calf at 1 year of age revealed reduced angulation between the hip and hock joints. The animal could walk with stumbling gait.

The phrase “hip dysplasia” denotes a badly formed hip joint due to embryological abnormalities characterized by lack of agreement between head of the femur and acetabulum, leading to instability of the joint. It is reported to be more common in canines than in other species. Corley (1987) documented the incidence of hip dysplasia in dogs to range from 0.9% in the Borzoli to 47.4% in the St. Bernard breeds. It appears that there are very few reports in cattle and buffaloes. Hence, in this paper, an unusual case of hip dysplasia in a graded Murrah calf has been presented.

Keywords: buffaloes, hip dysplasia, Murrah calf

HISTORY AND CLINICAL SIGNS

A calf, which was reported to have been born to a pleuriparous graded Murrah buffalo, upon natural service by a locally available bull, was presented to the College Hospital. The calf was delivered normally after completion of gestation period. It was unable to stand on its hind limbs (Figure 1) and forcible attempts to make it stand led to abnormal sitting postures (Figure 2). The calf was assisted in suckling periodically, and occasionally, it was also given bottle feeding.

Clinical examination revealed intact spinal reflexes with conscious proprioception. Physical examination revealed slightly upward rotation of stifle joints with prominent trochanters. However, the angulation of different joints of the hind limbs below the level of the hips was not far from normalcy. The calf was able to use its forelimbs to a significant extent. While it was alone, it crawled on the ground. Hip dysplasia has been described in the man and the dog, but there are very few reports of the condition in cattle. It appears that the available literature does not indicate this condition in buffaloes. Canine hip dysplasia becomes symptomatic either between 4-12 months of age or over 15 months of age (Riser and Newton, 1981). Contrary to this, the present case was symptomatic since its birth. Weaver (1978) observed clinical lameness at birth, and between 3 months and 3 years old in young bulls of Hereford. Aberdeen Angus, Galloway and Charolais breeds. The radiograph revealed a malformed acetabulum without any concavity (Figure 3). Muller et al. (1989) diagnosed a case of hip dysplasia in a Charolais bull by sign of Ortolani and distinct subluxation of the hip joint on a radiograph.

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Figure 1. The buffalo calf with dysplastic hip joints. Note the apparently lengthy hind limbs due to the unstabilized coxo femoral joints.

Figure 2. Note the abnormal posture of the calf and the detachment of femurs from their corresponding acetabula.

Figure 3. Showing the scanned and enlarged Skiagram showing the malformed acetabulum with a small sized head of femur.
Banfield et al. (1996) documented that dogs with dysplastic hips had an estimated risk for development of degenerative joint disease and osteoarthritis when compared to the normal dogs. Farrell et al. (2007) conducted retrospective evaluation of the long term outcome of non-surgical management of hip dysplasia in dogs and found that 95.8% had osteoarthritis of hip joint in the long run.

In the present case, the owner was advised to rear the calf until it attained an age of at least 1 year as the development of musculature and joints would compensate to some extent in the stabilizing the condition. Since this condition is hereditary in dogs, the same may be true with buffaloes also. Hence, the owner was advised to observe the progeny of the sire, within his locality before culling the same, in view of normal calves of earlier gestations. Examination of the calf at 1 year of age revealed reduced angulation between the hip and hock joints and it could walk with stumbling gait.

REFERENCES


