

Arthrogryposis in a calf

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ABSTRACT

A case of arthrogryposis in a calf and its surgical management has been reported.

Key words: Arthrogryposis, hind limbs, musculoskeletal system

Arthrogryposis is one of the musculoskeletal system abnormalities and frequently encountered as a congenital disease (Leipold et al., 1996). The present study describes surgical management of arthrogryposis of hindlimbs in a calf.

A day old Jersey crossbred male calf was brought to veterinary college hospital, Namakkal with the complaint of not able to stand on its hind legs. Physical examination of the animal showed rigid flexion of metatarso-phalangeal joints of both the hind limbs (Fig.) and did not show any abnormalities in its hip, stifle and hock joints. The calf was sedated with Xylazine hydrochloride at the rate of 0.10 mg/kg intramuscularly and controlled in lateral recumbency. After local infiltration using 2% lignocaine hydrochloride, a skin incision was made parallel to the tendon. On clearing the subcutaneous tissues, the superficial flexor tendon was identified and separated by blunt dissection. On applying traction on the fetlock joint, the tendon was transected. The skin wound was closed routinely. The same procedure followed on other hind limb. On completion of tenotomy, splint was applied on fetlock joint and bandaged using thick cotton. In this case, even after 20th postoperative days the condition was persisted without any improvement because of severe rigid flexural deformity.

The fixation of the joint may be due to lack of extensibility of the muscles, ligaments or other atrophy resulting from neuropathy is considered



Fig.: Arthrogryposis of both hindlimb

to be a major cause and the muscular rigidity is caused by impaired neurogenic functions due to influence on the motor activity of neurons in the spinal cord (Tyagi and Singh, 1996). In severe flexural deformities transaction of the flexor retinaculum and excision of the tarsal bones with arthrodosis of joint depending on location and severity of deformity may be tried.

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