Surgical Treatment of Congenital Metacarpophalangeal Flexural Deformity Associated with Contraction of Flexor Tendons in a Calf

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Metacarpophalageal(MP) flexural deformity in calves occurs due to congenital or acquired causes. Knuckling, standing or walking used by fetlock joint are shown in calves with flexural deformity. A two months male, weighing 70kg calf was referred to Veterinary Medical Center. The calf could only stand and walk with fetlock joint or carpal joint. Degree of MP flexural deformity of left forelimb was more severe than right one. Left forelimb had little angular deformity with varus. To loosen abnormal contraction of flexor tendons of right limb, midline between hoof and dewclaw on palmar surface was incised to expose tendons. Exposed superficial flexor tendon, deep flexor tendon and interosseus muscle were amputated in order while observing degree of relaxation of MP joint. Pressure bandage was applied on MP joint region for maintenance of normal MP joint angle after this procedures. To level the surface of the hoof on the ground, front part of the hoof was cut with saw. Left limb was operated in the same way and set in a cast. Abnormal of MP joint in right limb was almost corrected 15 days after first operation. In case of left limb, although MP joint problem was more alleviant than before surgery, the angle of MP joint was not maintained in normal range. It was reoperated aggressively 41 days after first operation. It was set in a cast to maintain angle of MP joint. Left limb is being monitored with post operative care until now. In congenital flexural deformity in calves, it is important to treat as soon as possible because the loss of a calf MP joint function cause development problems due to the difficulty of lactation. In case of missing the golden period of treatment, limb can be varus due to weight bearing or skin ulcer on dorsal surface of fetlock can cause arthritis. Tenectomy is considered relatively simple and effective.

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