USE OF BUTULINUM TOXIN ON CONTRACTURE OF FLEXORS CARPAL MUSCLES SECONDARY TO CORRECTION OF ANGULAR DEVIATION.

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Signalment: 1 year old, male, mongrel

History: (08/30/2012) The animal was attended presenting angular deformity on the right forelimb, after an old distal radius/ulnar fracture. This deformity was classified as recurvatum and was associated with a shortening and valgus deformity of the radio. It was requested to the owner to return to surgical panning when the animal reached bone maturity. (08/26/2013) After one year, the corrective surgery was done, by, an ostectomy of 0.5cm of radius and ulna at the distal CORA site, and the osteotomy was further stabilized with an Ilizarov external fixator, consisted of two proximal rings to osteotomy and one distal to it. The rings were connected with two hinges (medial and lateral) and a caudal angular motor. In the first moment was corrected the recurvatum deformity, followed to the member lengthening by osteogenic distraction. The valgus deformity was corrected in an acute form during the surgical procedure. After the entire post operative fase, the animal was unable to extend the carpal joint and do weight-bearing in the affected limb.

Physical examinations findings: Severe contracture on the muscles flexor carpi radialis, flexor carpi ulnaris and superficial digital flexor, resulting in a decrease of range of motion and restricted carpal extension. The goniometry on 5/09/13 showed an extension angle of the right carpal joint of 195 degrees, while the left, (healthy one) showed 210 degrees. The animal also had a moderate pain (VAS 6) in palpation in the respective muscles tendons.

Diagnosis: Contracture and pain in the muscles related to the carpal joint.

Problem list: Because of the pain and contracture, the animal can’t support the weight - bearing or have a normal gait, even if encouraged.

Medical, surgical and Rehabilitation Treatment: (12/09/14) There was applied 9 U of botulin toxin A (Botox®, Allergan) in the superficial digital flexor insertion, 9 U in the carpal ulnar flexor muscle insertion and in the insertion of radial carpal flexor. There were also applied 9U distributed on the flexors tendons sheath using a insulin syringe.

Follow up and assessment of outcome: (26/09/14) There was 100% positive response on pain score (VAS 0) of the muscles and tendons that have received the treatment. On goniometry score, an angle of 210 degrees was obtained on the right carpal extension, the same score of the other limb, the healthy one. The animal had no reaction on limb manipulation and accept the weight-bearing exercises, becoming possible to start the rehabilitation and physical therapy.


Declarations: None.