NEW CONCEPTS IN THE TREATMENT OF SHOULDER OCD

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Shoulder osteochondritis dissecans (OCD) involves fragmentation of cartilage, which partially or completely detaches from the caudal area of the humeral head.

It used to be more common in dogs of large breeds and can be bilateral although the clinical signs are usually unilateral. These animals usually present with a history of lameness after intense exercise. In general, the first symptoms are observed in 4-8 months old pets, although sometimes in 2 or 3 years of old pets.

Pain to the complete extension of the shoulder and in some cases also to the flexion are common finding of the clinical examination.

Diagnostic tests

X-ray of the shoulder is usually sufficient to detect the lesion, which appears as a flat area of the humeral head in the caudal area. It is essential a correct position of the patient, otherwise it may be difficult to make a reliable diagnosis. In the same way it is possible that even positioning the animal properly it is difficult to obtain a diagnostic image, since the lesion may be in the mid-caudal area of the humeral head. Therefore, if OCD is suspected, it is recommended to also perform radiographs with slight external rotation of the shoulder. It is not necessary to perform an arthrogram to show the lesion, but if it is done it is important to inject diluted contrast.

Another test that can be used is a CAT scan, since both shoulders are usually examined and it is possible to evaluate the elbows at the same time, since some of these animals may also have elbow dysplasia.

Treatment

The treatment currently recommended is the removal of the fragmented cartilage and revival of the subchondral bone until bleeding is observed. The use of arthroscopy to perform such treatment is becoming increasingly popular. If conventional surgery is performed, instead of minimally invasive, a caudolateral approach to the shoulder is usually performed.

Once this treatment is done, these animals recover fairly quickly and lameness usually disappears within 1 - 2 months. The postoperative period is usually based on the control of the exercise with short walks on the leash for about 4 weeks. The animal does not need to be confined in a cage.

Recently, the modified Cheli approach has been described: a latero-cranial approach with the shoulder hyper-flexed that allows exposing the caudal part of the humeral head. In this approach, it is essential to understand the anatomy of the shoulder because it is easy to damage the lateral glenohumeral ligament.

One of the main problems with cartilage removal is the progression of osteoarthritis. That is why there are several alternatives to traditional treatment. One of them is the use of an implant either autologous (by means of OATS system) or synthetic (Synacart) that covers the defect and restores the anatomy of the humeral head.

In human medicine, cartilage is sometimes fixed to the bone by means of chondral darts. These darts are made of a resorbable material and their placement can be carried out via arthroscopy, and have been used in veterinary medicine although no publications are available in this regard.