# **Elbow Dysplasia**

## Description

Elbow dysplasia is a general term used to identify an inherited polygenic disease in the elbow of dogs. Three specific etiologies make up this disease and they can occur independently or in conjunction with one another. These etiologies include:

- 1. Pathology involving the medial coronoid of the ulna (FCP)
- 2. Osteochondritis of the medial humeral condyle in the elbow joint (OCD)
- 3. Ununited anconeal process (UAP)

## Symptoms

Clinical signs involve lameness which may remain subtle for long periods of time.

Subtle changes in gait may be characterized by excessive inward deviation of the paw which raises the outside of the paw so that it receives less weight and distributes more mechanical weight on the outside (lateral) aspect of the elbow joint away from the lesions located on the inside of the joint. Range of motion in the elbow is also decreased.

## Treatment

Treatments do not address the cause of elbow dysplasia but can help to alleviate the symptoms. Ensuring that the dog is kept at an ideal weight can decrease pain and stress on the joint. Swimming can help with joint strength and flexibility. Aspirin will relieve pain and inflammation. Surgery is the only sure way of eliminating elbow dysplasia.

### Test method

X-rays are required for elbow evaluation and may be completed with or without sedation.

## Genetic/breeder information

The OFA does not participate in the decision process whether or not to breed an animal. However, the OFA strongly believes it is extremely important that breeders know and disclose the status of dogs' elbows regardless of whether the final decision is to breed or not. Only through complete and openly discussed knowledge of disease status will breeders have the information they need to make good breeding decisions.

Studies have shown the inherited <u>polygenic</u> traits causing these etiologies are independent of one another. No one can predict at what age lameness will occur in a dog due to a large number of genetic and environmental factors such as degree of severity of changes, rate of weight gain, amount of exercise, etc.

For elbow evaluations, there areno grades for a radiographically normal elbow. The only grades involved are for abnormal elbows with radiographic changes associated with secondary degenerative joint disease. The OFA will not certify a normal elbow until the dog is 2 years of age. The OFA also accepts preliminary elbow radiographs. To date, there are no long term studies for preliminary elbow examinations like there are for hips, however, preliminary screening for elbows along with hips can also provide valuable information to the breeder.

- Grade I Elbow Dysplasia: Minimal bone change along anconeal process of ulna (less than 3mm).
- **Grade II Elbow Dysplasia**: Additional bone proliferation along anconeal process (3-5 mm) and subchondral bone changes (trochlear notch sclerosis).
- **Grade III Elbow Dysplasia:** Well developed degenerative joint disease with bone proliferation along anconeal process being greater than 5 mm.

### Stats within CdT breed

From 1974 – 2012 there were 505 elbow evaluations submitted to the OFA. Of those, 97.8% were normal, 1.6% were dysplastic, and 1.6% were Grade I. There were no Grade II or Grade III elbows found in the Coton.

#### Further info links

Application for OFA Elbow evaluation:

http://www.offa.org/pdf/hdedapp\_bw.pdf

Source of data

www.offa.org