

Canine Elbow Dysplasia

What is canine elbow dysplasia

Canine elbow dysplasia, otherwise known as developmental elbow disease, occurs when there is abnormal development of the elbow joint. It is a collective phrase that encompasses a number of specific abnormalities which occur at different sites within the elbow joint.

The elbow is a complex joint consisting of the humerus, radius and ulna bones. The elbow joint acts like a hinge and the bones and cartilage surfaces which form the joint have complex shapes which should fit closely together. Normal forelimb gait is dependent on the elbow joint and therefore a small change to the shape of one, or several parts of the elbow joint, can have large consequences to the function of the joint.

Elbow dysplasia is most commonly seen in large and giant breeds including Labradors, Golden Retrievers, German Shepherd Dogs and Bernese Mountain Dogs. The cause of elbow dysplasia is not fully understood. Genetics certainly play a part in the development of elbow dysplasia, and it is likely that environmental factors such as exercise, growth rate and nutrition, will influence the severity of the disease however, they cannot prevent the disease from developing.

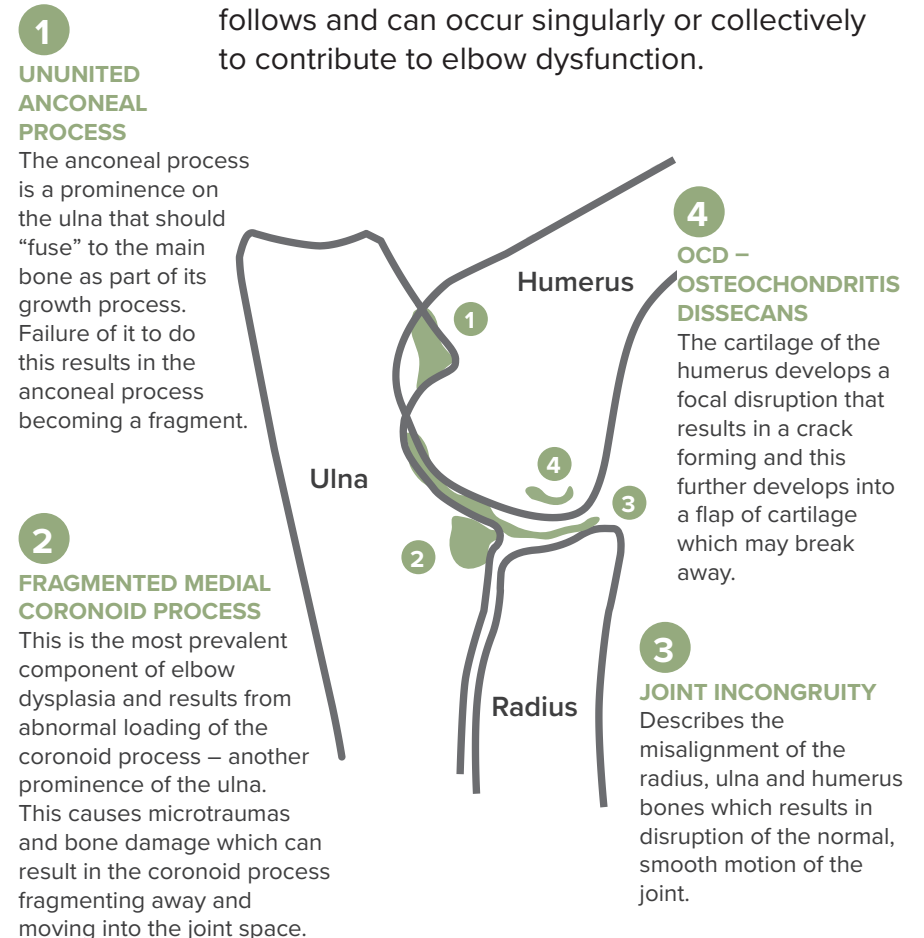
Forelimb lameness seen as a result of elbow dysplasia is usually first noticed by owners when their dog is 5 to 7 months of age. The lameness may be intermittent and mild to start with but causes enough concern for veterinary advice to be sought.

The signs of elbow dysplasia may be noted on radiographs and a CT scan will confirm the diagnosis. A treatment plan is then put in place.

Dogs with elbow dysplasia may then undergo surgery or arthroscopy to aid in the management of the disease however, this is not curative. Arthroscopy is a technique that is used for examining joints, most commonly the elbow joint. A camera is inserted into the joint through a small incision allowing high-definition images to be viewed on a screen. During arthroscopy very small instruments can be inserted in the joint to further examine the joint or to treat the disease, such as removing cartilage fragments which can cause pain and discomfort. Most patients improve in the short to medium term following arthroscopy however, eventually the dog will eventually go on to develop osteoarthritis (see fact sheet) and Degenerative Joint Disease (DJD) so continued care and management is paramount.

Joint supplements, physiotherapy, hydrotherapy, regular controlled exercise and targeting Activities of Daily Living (stairs, flooring, feeding height etc) as well as massage therapy can all be part of the multimodal approach to managing elbow dysplasia.

The components of elbow dysplasia are as follows and can occur singularly or collectively to contribute to elbow dysfunction.



ACTIVITIES OF DAILY LIVING

By following some simple steps
you can help your dog to manage his elbow dysplasia

BODY WEIGHT

Dogs must be kept as lean as possible with an optimum body condition score of 4/9 (normal is 5/9). As well as excess body weight placing additional pressure through the forelimb joints adipose (fat) tissue also releases destructive enzymes which damage the cartilage further.

STAIRS

Should be avoided where possible, particularly coming down stairs. If your dog has to go up and down stairs, try and limit the frequency. Consider using a stair gate to prevent access.

CARS

Jumping out of a car can be particularly troubling for a dog with elbow dysplasia. An SUV type vehicle increases the impact pressure by four times. Dogs should be lifted out of the car where possible or use a non-slip ramp or steps to help them in and out.

FEEDING HEIGHT

Getting the feeding height right can greatly help a dog with elbow dysplasia. Dogs naturally carry 60% of their body weight through their forelimbs. Stooping forward to eat and drink results in further weight transmission through these limbs. Raising food and water bowls reduces pressure through the wrist, elbow and shoulder joints and reduces tension of the neck muscles.

FLOORING

Today's modern homes can be a difficult environment for a dog living with elbow dysplasia. Laminate and tiled floors may cause a dog to slip and slide. This can result in a lack of confidence in walking on the floor, muscle strains and further microtraumas to the joint/s resulting in a pain flare up. Use antislip tape, mats and runners to help prevent slipping.

What are the signs of elbow dysplasia?

All types of elbow dysplasia can cause:

Pain and discomfort.

Lameness which may shift between the forelimbs.

Lameness which may appear suddenly or insidiously.

The dog may have a shortened, stilted gait pattern.

Pain may be elicited on flexion and/or extension of the elbow.

The dog may struggle to get up from a lying down position or lie down from a sitting position, be reluctant to exercise or jump down from high surfaces or come down steps and stairs.

How can clinical canine massage help?

Clinical canine massage can have a range of benefits including:

Massage can also help to improve overall joint health by increased circulation and oxygenation to the tissues and removal of metabolic waste products.

Pain management – helping to address myofascial pain and trigger points as well as inhibiting pain signals from the elbow joint to the brain.

Addressing areas of overcompensation, hypertonia (high toned muscles) as well as protective muscle splinting, which are commonly seen with elbow dysplasia.

Helping to improve Range of Movement to the elbow joint, depending on severity.