

Caring for Your Dog with Elbow Dysplasia

The elbow is a major weight-bearing joint in dogs. Elbow dysplasia is a term used to describe a syndrome where the joint does not develop or grow normally and causes pain as well as arthritis. It affects growing dogs of the larger breeds. Elbow dysplasia is inherited and you should not use affected dogs for breeding. It is important to understand that early treatment will give your pet the best chance at having a more normal life and less discomfort in the years to come.

The elbow is a complex hinge style of joint and can flex and extend just like your own elbow. The ends of three bones make up the elbow; they are called the humerus (upper arm bone), the radius and the ulna (forearm). The joint space is quite small and somewhat “C” shaped. The joint surfaces, within the joint, are covered in a strong white layer called cartilage. The cartilage is nearly frictionless and does not contain nerve endings. A normal elbow has smooth surfaces inside and the cartilage covers the underlying bone completely.

Unfortunately, the problems which occur with elbow dysplasia are not well understood. We do not know what the cause is. Research is being conducted to find out what factors may play a role. Many orthopaedic surgeons believe that there is a step within the joint causing the cartilage to wear away or break off from the ulna. This is called “step incongruency” and can change the way the forces are transmitted through the joint. The problem often occurs in both elbows.



Diagnosis of elbow dysplasia involves patient examination to detect elbow pain and swelling and x-rays of both legs to look for arthritis. It is common not to see anything unusual on the x-rays in young dogs that are seen by a veterinarian early. Arthroscopy can be used to look inside the joint and see cartilage and bone chips which can be removed.



If your dog has been diagnosed with elbow dysplasia you have the option of treating it with medications or surgery. It is ideal to combine the two approaches and give you pet every chance. Oral anti-inflammatory tablets are useful to reduce joint pain and can be safely used every day if required. A weekly series of four injections is also available to try to slow the rate at which the cartilage wears away. Exercise moderation and weight control are also important.

Removal of loose fragments such as cartilage and bone chips from within the joint can help many dogs if it is performed before significant arthritis develops. Arthroscopic surgery is available to examine the inside of the elbow and “clean things up” by removing loose fragments of cartilage and bone. The advantage of arthroscopy over “open” surgery is that it is minimally invasive and less painful. Both elbows can be done at the same time on an outpatient basis. A new procedure called a sliding humeral osteotomy is used for more advanced cases with full-thickness cartilage loss caused by mechanical abrasion. This surgery shifts the weight bearing loads onto the more healthy side of the joint. A stepped plate is applied after a transverse cut in the bone. The bone will heal back together in a new position overtime.