

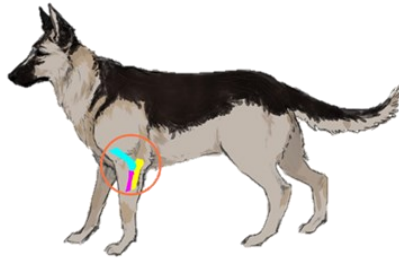


## ELBOW DYSPLASIA

### What is Elbow Dysplasia

“Dysplasia” is the medical term for abnormal development.

“Elbow dysplasia” is a series of four developmental abnormalities that lead to malformation and degeneration of the elbow joint. It is the most common cause for elbow pain and lameness and one of the most common causes for forelimb lameness in large-breed dogs.



- Intermittent or persistent forelimb lameness—worsened by exercise; progresses from stiffness seen only after rest
- Pain when extending or flexing the elbow
- Affected limb—tendency to be held away from the body (known as “abduction”)
- Fluid buildup in the joint (known as “joint effusion”)
- Grating detected with joint movement (known as “crepitus”)—may be detected with advanced degenerative joint disease (progressive and permanent deterioration of joint cartilage)
- Diminished range of motion

### How common is Elbow Dysplasia?

It is common in large and giant-breed dogs such as Labrador Retrievers, Rottweilers, Golden Retrievers, German Shepherd Dogs, Bernese Mountain Dogs, Chow Chows, Bearded Collies and Newfoundland's.

Age at onset of clinical signs—typically appear around 4-10 months of age and diagnosis is generally between 4-18 months of age. Onset of signs related to progressive and permanent deterioration of joint cartilage (known as “degenerative joint disease” or DJD) will occur at any age.

Males more likely to be affected than females due to the bone fragment located at the inner surface of the upper ulna (one of the bones of the foreleg), just below the elbow joint (known as “fragmented medial coronoid process”). Failure of the bones to fuse in the elbow of the growing dog (known as “united anconeal process”) and abnormal development of bone and cartilage, leading to a flap of cartilage within the joint (known as “osteochondritis dissecans” or OCD).

### The causes of Elbow Dysplasia

- Genetic
- Developmental
- Nutritional

### Clinical Signs

- Not all affected dogs have signs when young
- Sudden (acute) episode of elbow lameness due to advanced degenerative joint disease (progressive and permanent deterioration of joint cartilage) changes in a mature pet—common

### How is it treated?

#### Health Care

- Surgery—controversial, but recommended for most affected pets.
- Cold packing the elbow joint immediately following surgery to help decrease swelling and control pain; perform at least 5-10 minutes every 8 hours for 3-5 days, or as directed by your pet's veterinarian
- Range-of-motion exercises—beneficial until the pet can bear weight on the limb(s)

#### Activity

- Restricted for all pets post-operatively
- Following surgery—limit activity for a minimum of 4 weeks; encourage early, active movement of the affected joint(s), as directed by your pet's veterinarian

#### Diet

Weight control is important for decreasing the load and stress on the affected joint(s). Restricted weight gain and growth in young dogs can decrease incidence and severity.

#### Surgery

Severity of degenerative joint disease (progressive and permanent deterioration of joint cartilage) and advanced age of the pet will negatively influence the outcome. A variety of surgical techniques are possible, depending on type of elbow abnormality. Using a special lighted instrument called an “arthroscope” to allow the surgeon to see inside the joint may be used to diagnose and to treat elbow abnormalities.

## What medications are available?

- No medication promotes healing of bone and/or cartilage fragments
- Nonsteroidal anti-inflammatory drugs (NSAIDs): minimize pain, decrease inflammation, symptomatically treat associated degenerative joint disease (progressive and permanent deterioration of joint cartilage); examples include *carprofen*, *deracoxib*, *etodolac*, *meloxicam*, *tepoxalin*
- Medications intended to slow the progression of arthritic changes and protect joint cartilage (known as “chondroprotective drugs”), such as polysulfated glycosaminoglycans, glucosamine, and chondroitin sulfate—may help limit cartilage damage and degeneration; may help alleviate pain and inflammation

## Follow Up Care

It is recommended to have yearly examinations to assess progression and deterioration of the joint cartilage (degenerative joint disease). Furthermore breeding of affected pets is discouraged and to not repeat dam-sire breeding's that result in affected offspring. Progressive and permanent deterioration of joint cartilage should be expected but prognosis is fair to good for all forms of the disease.

Elbow dysplasia is a genetic disease and an excessive intake of nutrients that promote rapid growth has an influence on the development of elbow dysplasia; therefore, restricted weight gain and growth in young dogs may decrease the incidence of elbow dysplasia.