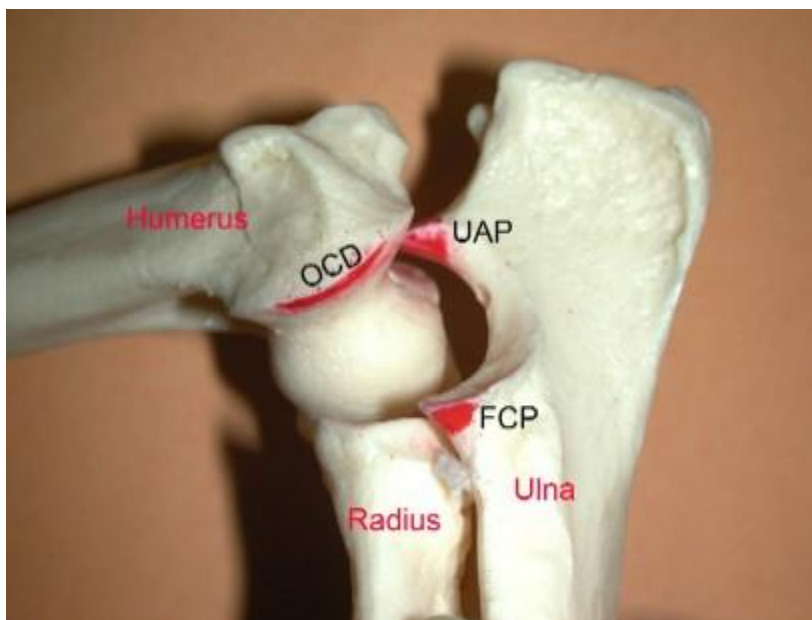


# Paws, Claws & Wings

Physical and Behavioral Rehabilitation for Animals

## Elbow Dysplasia

- Elbow dysplasia can cause lameness in young large-breed dogs and is commonly found in both elbows.
- Elbow dysplasia is a generic term meaning arthritis in the elbow joint.
- The best prognosis is expected with early treatment performed prior to extensive degenerative osteoarthritic changes. In this case, return to good function is expected, although some degenerative changes may still occur later in life. If extensive osteoarthritis is already apparent in the joint prior to treatment, the prognosis is poorer, but treatment may slow further degeneration of the elbow.
- There are four developmental causes of elbow arthritis in dogs:
  - osteochondritis dissecans, ununited anconeal process, fragmented coronoid process, and elbow incongruity.



- Osteochondritis dissecans (OCD)

OCD is a condition in which a piece of cartilage becomes partially or fully detached from the surface of the elbow joint. This results in inflammation of the lining of the joint and pain. Common clinical signs of OCD begin between 5-8 months of age and include acute or chronic intermittent lameness, stiffness, and stilted gait. Lameness is usually intensified by exercise, and is prominent after resting. In some cases, lameness is not apparent until later in life.



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- Fragmented medial coronoid process

Fragmented medial coronoid process is a condition in which a small piece of bone on the inner side of the joint has broken off of the ulna bone. This piece of bone irritates the lining of the joint and grinds off the cartilage of the adjacent humerus (similar to having a pebble in your shoe). Common clinical signs of FMCP begin between 5-8 months of age and include acute or chronic intermittent lameness, stiffness, and stilted gait. Lameness is usually intensified by exercise, and is prominent after resting. In some cases, lameness is not apparent until later in life.

- Ununited anconeal process

Ununited anconeal process is a condition in which a fragment of bone on the back side of the joint has failed to unite with the ulna bone during growth. Normally this bony process fuses with the ulna bone by 20 weeks of age. The breeds most commonly affected include German Shepherds, Bassets, Mastiffs, and St. Bernards. Clinical signs are usually not seen before 5-8 months of age. Occasionally, lameness is not observed until the dog is several years old. In the earliest stages, the only clinical signs may be a slight limp and standing or walking with the paw turned out.

- Elbow incongruency

Elbow incongruency is a condition in which the joint does not have perfect conformation, and the cartilage of the joint wears out rapidly. In simple terms the joint does not fit together well and the final result is progressive arthritis.





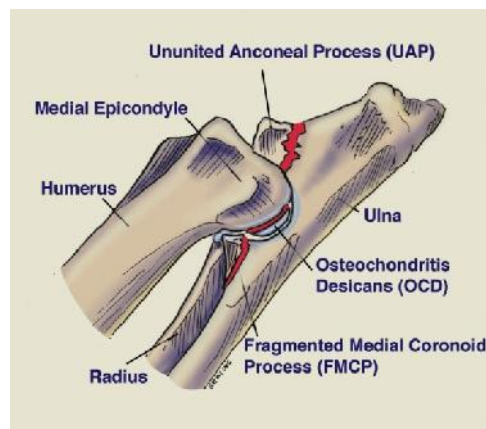
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## Treatment

- Arthroscopic surgery is used to treat OCD and fragmented coronoid processes. This technique allows us to treat the lesions more accurately and allows us to examine more of the joint. Because it is minimally invasive, the patients recover much quicker and have less pain.
- Usually we can successfully remove the offending loose pieces from the joint using arthroscopic surgery, however if we are unsuccessful, a small incision is made on the inner side of the elbow. If your pet has an ununited anconeal process, arthroscopy of the joint is recommended to rule out a concurrent fragmented coronoid. Because an ununited anconeal process is fairly large, it is removed via a small incision made on the outer (lateral) side of the elbow joint.



## Physical rehabilitation:

Rehabilitation is aimed at preserving and promoting the leg's muscle mass, strength and range of motion through early (3-5 days) postoperative weight bearing ambulation and passive range-of-motion exercises. Early ambulation can be achieved by assisting the dog in getting up and walking. A towel can be placed under the abdomen to make assistance easier to perform in heavy dogs. Leash walks and/or swimming should be performed until near normal use of the leg returns. Passive range of motion physical therapy is also necessary to increase muscle strength and flexibility.

Not using the limb causes a shortening of the muscle groups involved and it will sometimes be impossible to regain the normal usage of the limb. Muscle atrophy will then greatly reduce the strength of that leg. As the time increases that the limb is not used, the chances for a full recovery decrease. One day of muscle wasting allowed will take three days to regain.