

Elbow Dysplasia – Shortened Radius

Surgery Service



**Michigan Veterinary
Specialistssm**

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- Ophthalmology
- Orthopedic Surgery
- Radiology & Fluoroscopy
- Soft Tissue Surgery
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Locations

Auburn Hills

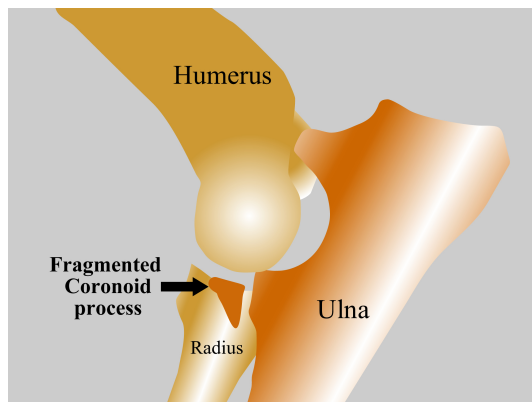
3412 E. Walton Blvd.
(West of Squirrel Rd.)
(248) 371-3713

Grand Rapids

1425 Michigan St. NE
(East of Fuller Rd.)
(616) 284-5300

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(248) 354-6660



What is a shortened radius?

Growth plates are responsible for longitudinal growth of many bones in the body, including those of the limbs. If there is an injury to a growth plate, the bone may fail to attain its normal length. If the growth plate located at the top or bottom of the radius bone fails to grow, the elbow joint may become incongruent (does not fit well together). With the top of the radius riding lower than normal, the humerus bone slides forwards and downward, which puts excessive pressure on the coronoid process. This will cause this process to

break or fragment off the ulna bone. This loose fragment of bone can cause damage to the elbow joint. In addition, the poorly fitting elbow joint will cause excessive wear of the cartilage within the joint. The result is arthritis within the elbow.

Signs and diagnosis

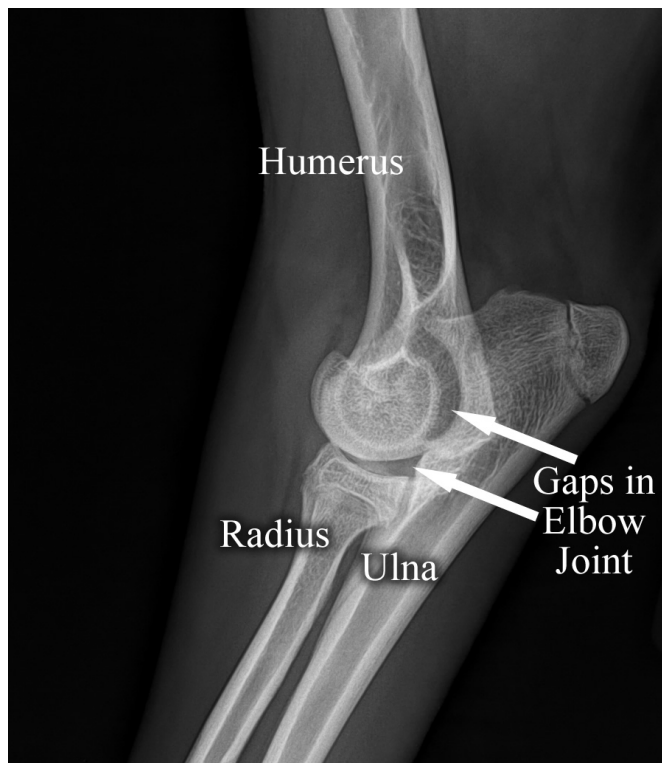
This condition typically affects young dogs. The primary clinical sign of this condition is lameness or stiffness on the affected limb. X-rays of the elbow joint are necessary to make a diagnosis of a shortened radius bone and elbow incongruity. In some cases, a diagnosis of a fragmented coronoid process can be made on the x-rays, yet many cases require additional testing. CT scan or arthroscopic surgery of the elbow joint is usually the best diagnostic tools used to diagnose fragmented coronoid processes.

The day of surgery

Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery, which will keep your companion comfortable. This may include a combination of general anesthesia, injectable analgesics, oral analgesics, and anti-inflammatory medication.

Treatment

Arthroscopic surgery is the recommended treatment for elbow conditions. Two very small incisions are needed to perform the surgery, which means less pain for your companion versus traditional open surgery. The joint is examined with a very thin telescope to confirm the



Shortened Radius Continued...

diagnosis. If your pet has a fragmented coronoid process it is removed with a combination of an arthroscopic shaver and small instruments. The second goal of surgery is to make the elbow fit together again. This can be accomplished by lengthening the short radius bone, or can be accomplished by shortening the ulna bone. The latter is a simpler technique that involves removing a segment of the ulna bone and placing a pin down the shaft of the ulna bone. With time, the gap in the ulna will heal together.

Care at home

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. It's also extremely important to limit your dog's activity and exercise level during this post-operative period. Rehabilitation exercises can be done at your home or if you choose, by professionally trained therapists at an animal rehabilitation center. Rehabilitation therapy should be continued until your dog is bearing weight well on the operated limb. Detailed instructions will be given to you after the surgery.

The healing process will be monitored by the surgeon with two follow-up exams. The first is scheduled for two weeks after the surgery and the second is at eight weeks after the surgery. By two weeks after surgery, most dogs are bearing a moderate amount of weight on the operated limb, although exercise should be limited during the first two months after the procedure. By four months after surgery, recovery will plateau. If there is residual lameness, long-term medications may be needed to keep your companion comfortable. If the pin causes irritation to the soft tissues, it may be necessary to remove the pin after the bone has healed.



Shortened Radius Continued...

Assessment and recommendations

Patient Name: _____ Date: _____

Treatment

- Surgery of your companion's elbow(s) is recommended
- No surgery is recommended

The following has been prescribed

- No medications or special diet are necessary at this time
- Prescription joint diet: _____
- Neuroceutical: _____
- Nonsteroidal anti-inflammatory medication: _____
- Other medication: _____

Exercise:

- Unlimited
- Confine your pet to the house other than very short leash walks necessary for bowel movements and urination
- Restrict exercise to leash walks 10 minutes twice daily

Preparation for surgery

- Start fasting your companion at midnight before surgery; water should not be withheld
- Pepcid AC 10 mg tablets: give _____ tablets with water (if needed use a syringe) at 6 AM on the day of surgery
- Other medications: _____

*Composed by Daniel A. Degner, DVM, DACVS
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