

Informed Consent

Ulnar Osteotomy/Osteotomy

Your pet has been diagnosed presumptively with a growth discrepancy between the radius and ulna, the two bones that make up the lower arm. The two bones are supposed to grow at the same rate through maturity. However, trauma or other issues with the growth plates may slow or stop the growth occurring in one of the bones. Trauma to the growth plate of the ulna at its distal aspect (close to the wrist or carpus) is the most common scenario, since that growth plate is relatively fragile. When one bone stops growing while the other one keeps growing, that causes problems in the joints (elbow and wrist). If left unchecked through maturity this may lead to angular limb deformity, which means the leg is crooked and may be short. The recommendation for young pets that are still growing is to make a cut (osteotomy or osteotomy) in the bone that has stopped growing (in this case, the ulna), allowing the other bone to be “released” to continue normal growth. The goal is to minimize effects that the ulna would have by “tying down” the radius. You have elected this treatment for your pet and the prognosis is very good, but we need to make you aware of a few of the complications that could arise after this surgery. If you have any questions or concerns, please let us know.

The risks of complications after ulna osteotomy/osteotomy is low, about 5% of cases. Here are some potential risks:

Arthritis/osteoarthritis (OA)/degenerative joint disease (DJD)- arthritis can occur in the elbow and/or carpus. Despite our goal of restoring more normal growth, there was damage to the joint as soon as the ulna stopped growing, and that damage is not reversible. The abnormality present will likely contribute to arthritis as your pet ages. Additional therapies may be needed.

Pin migration- in many cases, a pin is placed in the ulna to keep the ulna aligned. The pin has a tendency to migrate (back out) and that can cause lameness and swelling over the site of the pin. Removal of the pin is not uncommon and is recommended in these cases.

Infection- this is a risk with any surgery and is usually treatable with oral antibiotic therapy. Septic arthritis is a rare infection of the joint.

Need for corrective osteotomy-depending on when the growth discrepancy is diagnosed, the ulna osteotomy/osteotomy has a variable impact on the future growth of the radius. When diagnosed very early, we may be able to intervene before any curvature of the limb is noted. If the growth discrepancy is not diagnosed or treated until near maturity, the impact of the ulnar osteotomy/osteotomy is reduced. If the angular limb deformity is severe enough, more surgery may be recommended. The goal in that case is to straighten a limb that may to improve limb alignment and function.

Premature healing- this is usually avoided by removing a piece of the ulna (ostectomy) versus just making a cut in the ulna (osteotomy). However, young dogs are good at healing and if they heal too fast, they might not get the maximum benefit from the surgery

Nonunion- this is a failure of bone healing and may or may not require additional therapies