

Post-operative care after distal ulna growth plate osteotomy in growing dogs

This surgery is performed in growing dogs, typically around 6 months of age, to prevent or to limit growth abnormalities resulting from early closure of the distal (lower) ulna (bone in the forelimb) growth plate. Long bones grow from “growth” plates, regions near the upper and lower extremities of the bone. Growth normally ceases around the age of skeletal maturity at about one year of age, and the growth plates normally close at this time. There are two bones, the radius and the ulna, in the antebrachium (the “forearm” region of the forelimb) located between the elbow and above the carpus (wrist). Almost all of the growth of the ulna comes from its lower growth plate, while the growth of the radius is divided roughly equally between the upper and lower growth plates. The ulna growth plate is cone shaped and it is positioned on the outside of the limb, and is vulnerable to trauma which can lead to early closure of this growth plate. If the ulna growth plate closes early, then the ulna ends up short and acts like a bow string, acting to oppose growth in the radius which is still growing and can become bow shaped. So early closure of the ulna growth plate can lead to one or more of the following: a short ulna, a bowed radius, a foot which turns/twists outwards from the level of the carpus, and an elbow joint which doesn’t fit snugly and is said to be “incongruent”. Excision (removal) of the distal ulna growth plate is well tolerated by patients and allows straight radius growth to continue without interference. Excision of the distal ulna growth plate also reduces the effect of a short ulna leading to incongruity in the elbow. Lameness resulting from the surgery is usually mild and transient. Dressings are only usually used for a few days post-op. Sometimes we need to make an osteotomy (bone cut) in the proximal (upper) ulna to allow the elbow to settle into a best-fit position. See our separate information sheet on dynamic ulna osteotomy (DUO). DUO usually results in significant lameness for a couple of months while the proximal osteotomy heals with callus formation. Sometimes we need to cut, straighten and then plate the radius if it is already very bowed, to straighten up the leg. If the growth plate injuries happened earlier than about 5 months of the age, the leg might end up short enough that limb lengthening procedures are required, but this is thankfully relatively uncommon.

Medication:

- Antibiotics:** Antibiotics like claviseptin are usually given for a few days (usually tablets given twice daily).
- Anti-inflammatories:** Non-steroidal anti-inflammatory drugs usually start/resume the morning after surgery. These are tablets (eg carprofen, Onsior or Previcox), or liquid (meloxicam). They should be given with food. If vomiting or diarrhoea is noted, stop this medication and seek prompt advice.
- Analgesics:** We may have dispensed tramadol (tablets given twice daily).

The wound(s) and dressing(s) should not be interfered with by the patient or bathed. An Elizabethan collar helps to prevent wound interference. The wound(s) will usually be covered by a thin white Primapore dressing which will fall off on its own in anything from a few days to a couple of weeks. We use a spray glue to increase the chances of these staying in place. Without the spray glue, it is very unlikely that you will be able to get a replacement Primapore to stick on for any significant time so it is best to leave ours in place as long as possible! A few drops of dried discharge may be evident on the Primapore at the time of discharge, but if any further ooze is seen either while the Primapore is in place or after it has come off, advice should be sought. Any ooze may be gently blotted with kitchen towel until a vet sees the case for a check up. More substantial dressings are occasionally used for a few days over the basic Primapore to reduce swelling. If used, these should be kept dry at all times. If they become significantly wet or slip then they can be removed. When any “over dressing” is removed, the thin white Primapore layer is still left in place as long as it will stay on to give some on-going protection.

Strict lead restriction is advised in the early stages of healing until you are told to the contrary, anywhere outside of the house including the garden. Running/jumping/climbing (into cars, upstairs, onto furniture) must be prevented. Consider using stair gates and ramps.

Rechecks are recommended at 2-3 weeks and 6-8 weeks post-op. Rechecks at 3-5 days are advised if there are issues. Check-ups with us at Barton under Needwood are free of further charge and only take a few minutes. Check ups at your home practice are chargeable. For rechecks at Barton under Needwood, please contact us to book an appointment. For rechecks at your home practice, please ring your own vets to book these. Where travelling is an issue, and/or for dogs that get very anxious at the vets, a simple phone conversation with us and/or a text/email photo of the wound may well suffice in lieu of the 3-5 day check. **By 3-5 days there should be significant weight-bearing on the operated leg. There may well be significant bruising evident. There may be significant swelling lower down the leg at this time as inflammation “drops” down the leg. Swelling and bruising should disappear with a few days.** At the 2-3 week check, sutures may be removed or left to slough.

Follow up radiography, to assess the distal ulna before free exercise is allowed, can be performed conscious 6-8 weeks post-operatively with us for no extra charge. This only takes a few minutes with our hand-held X-ray generator. It is best not to feed your pet beforehand just in case we need to sedate. If X-rays are done at your own vets these will be chargeable and will likely require sedation or anaesthesia.

The future

Infection occasionally occurs. If implants have been used, there is occasionally the need for implant removal. Degenerative joint disease (DJD), often called “arthritis”, may become evident in the elbow and / or the carpus in future months or years. This may well progress and may require future medical management for DJD. Your own vet will advise you what is required, or see our separate information sheet.

Our fixed prices include any follow up consults and x-rays done with us, but don’t include further medication or revision surgery. For further details please see www.wm-referrals.com, “about us”, “FAQs”. Consults, dressings, x-rays and drugs from your usual vet will be chargeable. For further advice please contact us on 07944 105501 or at enquiries@wm-referrals.com. Consider texting/emailing pictures.