Post-operative care after distal ulna growth plate ostectomy 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 bowed. 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:** We usually dispense antibiotics like clavaseptin (tablets given twice daily)
- **Anti-inflammatories:** We are likely to have dispensed carprofen (tablets given twice daily), or meloxicam (a liquid given once daily). These are given with food. They occasionally cause vomiting or diarrhoea, in which case prompt advice should be sought. There are a number of other excellent anti-inflammatory drugs that your own vet might use including Onsior and Previcox.
- **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 oozing is seen either while the Primapore is in place or after it has come off, advice should be sought. Any oozing 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 restrictions** 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 3-5 days, 2-3 weeks and 6 weeks post-op.** These can be with your home practice or we can do check-ups at Lichfield if travelling is not an issue, and any check-ups with us are free of further charge. For cases operated by us at Lichfield, please contact us to book an appointment for us to see the case back. For surgeries performed at your home practice, please be sure to ring your own vets to book check ups. For dogs that get very anxious at the vets, a simple phone conversation and a texted/emailed photo of the wound may well suffice in lieu of the 3-5 day check. By 3-5 days we expect significant weight-bearing on the operated leg; that there will be some skin bruising evident, and there may be some significant swelling lower down as inflammation “drops” down the leg. Swelling and bruising should then disappear with a few days. At the 2-3 week check, sutures may be removed.

**Follow up radiography** is typically performed 6 weeks post-operatively with us or with your own vets to assess how the distal ulna has healed. This may require sedation so it is best not to feed your pet on the day of this procedure.

**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](http://www.wm-referrals.com), “about us”, “FAQs”.

For further advice please contact us by phone on 07944 105501 or at mail@wm-referrals.com. Consider texting/emailing pictures.