

Tibial Tuberosity Advancement – Post Operative Instructions

Your dog has had a TTA (Tibial Tuberosity Advancement) procedure. This operation redirects the force generated by the large quadriceps muscles to compensate for a failed cruciate ligament. This is achieved by cutting free, and moving forward, the part of the tibia (the tibial tuberosity) attached to the quadriceps muscle. The bone cut is called an osteotomy, and the osteotomy is stabilised with a cage, plate, and screws – as seen in this example post-operative radiograph.



The post-operative period is every bit as important as the surgery itself, and successful recovery demands some weeks of controlled activity. Many dogs are tempted to use the operated leg too much, too soon! Irrespective of how comfortable and confident your dog feels as they recover from TTA surgery, it is absolutely essential that slippery floors, stairs, running, jumping, climbing onto furniture, steps, and any ‘rough and tumble’ with other pets is avoided for the first six weeks or so.

The tibia must be given time to heal adequately, as too much strain placed on the osteotomy too early can result in stress fracture or implant failure – whilst this is rarely catastrophic, the ensuing complication may be painful, could necessitate further surgery, and will certainly delay recovery.

Medication

Prior to surgery and in the immediate post-operative period your dog will have received various medications to reduce pain, alongside antibiotic as well. Your dog will go home with two different pain killers as well as an antibiotic. Please follow the instructions on each dispensed medication, ensuring the full course of each is given to your dog.

Ice Pack

Apply an ice pack four to six times daily, as long as your dog does not resent this. Wrap the ice pack in a tea towel and apply to the inside of the leg at knee level. Initially wrap the ice pack in a couple of layers of the towel and leave on for just one or two minutes. Once your dog is used to this, apply the ice pack for four or five minutes within a single layer of towel.

Wound Care

The incision site is on the inside of the leg – intradermal sutures will have been used to close the wound, so there will be no stitches for you to see or more importantly for your dog to chew! If the wound discharges or your dog continually licks at it, please let us know. There will often be some post-operative swelling that starts under the wound and drops down to the hock – this rarely causes any problem at all, and ice packing will help reduce any such swelling.

Activity

As previously noted, it is absolutely essential that slippery floors, stairs, running, jumping, climbing onto furniture, steps, and any 'rough and tumble' with other pets is avoided for the first six weeks or so.

If your dog had their right hindlimb operated on, have them walk on a lead on your right-hand side. If your dog had their left hindlimb operated on, have them walk on a lead on your left-hand side. If they pull on the lead, this means most of their weight and force will go through their good leg. Should your dog pull on the lead, do not yank them towards you but gradually ease them back to where they should be!

Below are guidelines for controlled activity – if at any point your dog seems less comfortable, reduce the amount of exercise for a day or two.

Week One: Keep confined in one room (or two rooms at the most) on the ground floor of your house that has nonslip flooring. Take out to the garden **on a lead** five or six times daily.

Week Two: Keep confined in one room (or two rooms at the most) on the ground floor of your house that has nonslip flooring. Take out to the garden **on a lead** when toileting is required. Take out **on a lead** for a **steady** five-minute walk up to four times daily.

Week Three: Keep confined in one room (or two rooms at the most) on the ground floor of your house that has nonslip flooring. Take out to the garden **on a lead** when toileting is required. Take out **on a lead** for a **steady** ten-minute walk up to four times daily.

Week Four: Keep confined in one room (or two rooms at the most) on the ground floor of your house that has nonslip flooring. Take out to the garden **on a lead** when toileting is required. Take out **on a lead** for a **steady** fifteen-minute walk up to four times daily.

Appointments and Follow Up Radiography

Usually, your dog will have a follow up appointment one week, two weeks, and four weeks after their TTA surgery. Following the week four post-operative appointment, if your dog is recovering as anticipated, they will be booked in for sedation and radiography of their knee. This is to ensure bony union is forming at the osteotomy site. If so, typically at approximately six weeks after TTA surgery dogs can begin returning to off lead activity.

At first, your dog can be allowed off the lead for five minutes towards the end of the last walk of the day – choose a quiet area with a good surface and without distractions that might encourage your dog to do too much too soon. Subsequently, the amount of free running play and exercise can be increased gradually back towards normal levels. Most dogs will be capable of full, unrestricted activity within 12 weeks of their TTA surgery, and regain full fitness thereafter.