



PET UNIVERSE
VETERINARY CENTRE

2018



Triple Tibial Osteotomy

PET UNIVERSE PATIENT EDUCATION SERIES

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Pet Universe Standards of Care

We pride ourselves on providing the very highest standards of general anaesthetic and surgical care. Because we know Levi is the most important pet in the world to you, we treat Levi like our own and he will receive similar care to what you would expect when you go to hospital.

Healthcare From Your Pet's Point of View During Anaesthesia Includes:

- Pre-anaesthetic blood test to check for any underlying risk factors prior to surgery
- Pre-medication which includes a sedative to help Levi relax and reduce the amount of anaesthetic required
- 3 types of pain relieving medications, given before, during and after the procedure to provide a high level of pain relief
- Intravenous fluids to maintain hydration and blood pressure, ensuring blood supply to vital organs and to help avoid the drowsiness often felt after an anaesthetic
- Advanced warming techniques, before, during and after Levi's procedure to ensure optimal body temperature is maintained
- For maximum safety Levi is maintained on isoflurane anaesthetic machines
- Human grade anaesthetic monitoring machines ensure the safest procedure so any slight changes in the status of Levi's anaesthetic will be detected and treated immediately to minimize chances of a serious situation developing
- Dedicated surgical nurses for Levi's entire surgery and recovery
- Heart Rate monitoring and Pulse Oximetry (pulse strength and blood oxygen levels)
- Respiratory Rate monitoring and Capnography (concentration of gases breathed in and out)
- Blood Pressure monitoring - state of the art equipment calibrated for dogs and cats and ECG as needed
- Advanced in-house anaesthetic training for nurses



How We Perform TTOs

TTO (Triple Tibial Osteotomy) is an advanced surgical procedure that is performed to correct the effects of damage to the Cranial Cruciate ligament in the knee joint. The cruciate ligaments are 2 ligaments that cross over inside the joint to keep the knee stable as Levi is walking. If there is a partial or full tear of this ligament, then the knee joint becomes loose and rubs abnormally as it slips forward with each stride. This results in crushing and scraping of cartilage as well as swelling causing pain and inflammation within the joint. If left untreated this will lead to severe painful arthritis.

There are many repair techniques but TTO has better return to function unlike other techniques which aim to "replace" the ligament. TTO involves changing the angle of the top of the tibia (or Tibial Plateau) in order to alter the forces within the joint, therefore preventing the tibia from slipping forward. This involves cutting a wedge of bone out and placing a specialised bone plate to secure everything in place. X-rays are required prior to surgery in order for the surgeon to work out how much bone needs to be removed and the angles of the cuts that need to be made, so there is lots of maths and physics involved!

It is a relatively new technique with fantastic results especially for dogs weighing over 20kg. The procedure is complicated and surgical time tends to be between 2.5 to 3 hours. Most general practitioners would refer Levi to an orthopaedic specialist for TTO surgery but at Pet Universe, we have been performing this surgery routinely since 2008 both for our clients as well as referrals from other veterinarians.

Sutures are removed 2 weeks after the surgery. To prevent licking, we use an Elizabethan collar and as usual lots of pain killers and antibiotics!



Pre-anaesthetic information

Levi has been booked in for a procedure. We hope this information will cover any questions/concerns that you may have.

Preparing for the anaesthetic

For Cats/Dogs: Please do not feed Levi after 8pm the night before as food in the stomach during anaesthesia can reflux and cause painful oesophagitis or even aspiration pneumonia which can be life-threatening. You can let Levi have access to water through the night but remove the water when you wake in the morning.

For Rabbits: Please ensure Levi has access to food and water at all times. Please bring his favourite food with you on the day of his procedure.

The day of the procedure

We normally ask for you to arrive at the clinic between 8:00-8:30am (unless we have organised something different). On arrival you will be asked to take a seat and Levi's dedicated surgical nurse will come to admit Levi for the day. During admission, the surgical nurse will arrange a 10minute discharge appointment where you will be advised of any medications and the aftercare that Levi will need.

To reduce waiting times, admission appointments with Levi's dedicated surgical nurse can be made from 8.30 am. Appointments are great if you have questions or if you have special requirements such as when you are/are not contactable during the day.

If drop off is required and you are in a rush to get to work, then your consent forms can be pre-signed when booking the procedure or the day before so you can arrive from 8 am, check the form and drop Levi off.

What happens after you leave Levi with us

Once Levi has been admitted we get Levi settled into one of our kennels with a comfy bed. We know this can be an anxious time for you, but rest assured that we will treat Levi as if he was our own. We place an intravenous catheter (i.v. line) into the front leg (you will see a small clipped area on the leg) and a blood sample is taken to test for organ function and blood count. Providing all is ok with the blood tests (we will contact you to discuss the results if there are any issues) we will go ahead and pre-med Levi (pre-meds are a light sedation and pain relief which help relax Levi before his procedure). We will then proceed with the anaesthetic and procedure.

Once the procedure has been completed Levi's dedicated surgical vet will call you with an update and confirm his discharge time.

After the procedure

To ensure that Levi has recovered well and is pain free we routinely do a post-operative assessment 1-3 days after surgery. This is a complimentary appointment but should any additional materials or medication be required you will still only be charged for the materials or medication. Any appointments after this time period will incur a consultation fee.



IMPORTANT INFORMATION REGARDING RESUSCITATION

As outlined in our Standards of Care Value Sheet, we pride ourselves on providing the very highest standards of general anaesthetic and surgical care. However, even with these measures in place, there is always a risk involved with every anaesthetic.

In the case that Levi were to suffer cardiac and/or pulmonary arrest (heart or breathing stops), we need to know if you authorise us to provide life-saving measures (i.e. cardiopulmonary cerebral resuscitation or "CPCR").

CPCR can include endotracheal intubation (placement of a breathing tube), administration of drugs, cardiac compressions (pushing on the chest) and assisted breathing with oxygen supplementation.

The cost of these services can be between \$400 to \$750 which is generally NOT reflected in your estimate. If you choose to allow these procedures for Levi, you will be contacted as soon as possible to be informed of the situation and given the options about how to proceed.

In a critically ill patient, you may want to elect a do not resuscitate status or a "DNR". In a healthy pet undergoing an elective procedure, we would strongly recommend you allow full resuscitation.

On admission of Levi for his surgical procedure the nurse or vet will ask if you authorise us to provide life-savings measures. You will be asked to initial your selection, followed by the printing of your name and signature. Please allow time for this and the completion of the consent form upon admission.

If you have any questions regarding CPCR, please don't hesitate to contact one of the members of our team, or feel free to discuss your concerns at the time of admission.