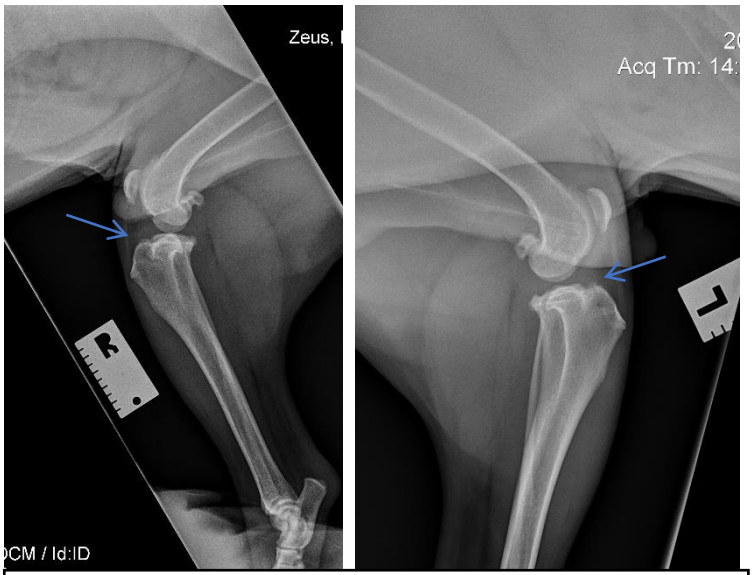
Mighty Zeus's Miraculous Recovery

Zeus came to us through our charity work with Pets In The Park. His owner had taken him from a life of dog fighting to one filled with kindness and love instead, moulding him into a gentle, friendly soul.

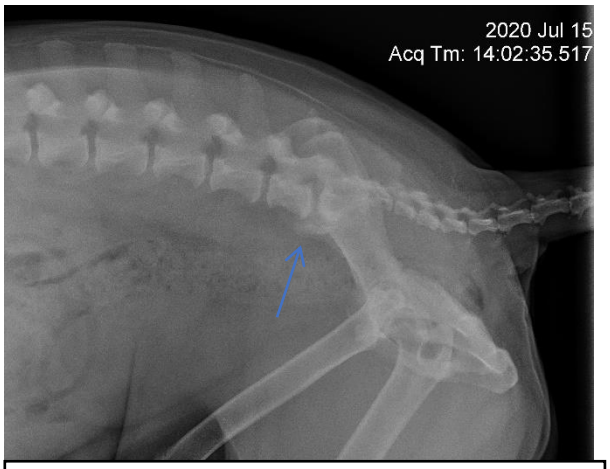
Unfortunately a week after being grazed by a car, it appeared Zeus was having difficulty walking. He was tip-toeing on his back legs and at times "hand standing" on his front end. His only comfort was when he sat or lay down. Through our charity work with Pets In The Park, his owner was able to leave him with us so we could investigate what was going on.

Click here to see a video of Zeus prior to surgery

Our first step was to perform a set of x-rays of his hind end under a general anaesthetic. This would ensure we had good quality images to make the most accurate diagnosis. What we discovered even shocked Dr Geoff – Zeus had torn both left and right ACLs (anterior/cranial cruciate ligaments) in his knees and he had ankylosing spondylosis (inflammatory fusing of his spinal column with bone spurs) towards his lower back. This meant that every time Zeus took a step he would feel unstable on his hind legs and sharp pain in his back. Despite occurring right after his accident, the car had not caused these chronic changes we were seeing on x-rays.



Arrow show inflammatory fluid accumulation in the knee joint, indicating ACL tears



Arrow shows ‘ankylosing spondylosis’

This diagnosis presented us with a problem. We often see dogs with ACL tears of one leg (and then the other side a couple of years later) but not both at the same time and not together with spinal disease.

If we performed surgery on one leg, the other leg would still be unstable and he would still be unable to walk. If we did both legs together, there was still the question of whether his spinal lesion would affect him. If we did nothing, he would continue to suffer and eventually lose the ability to walk altogether.

After doing some research, we concluded Zeus would benefit from having both knees done at the same time.

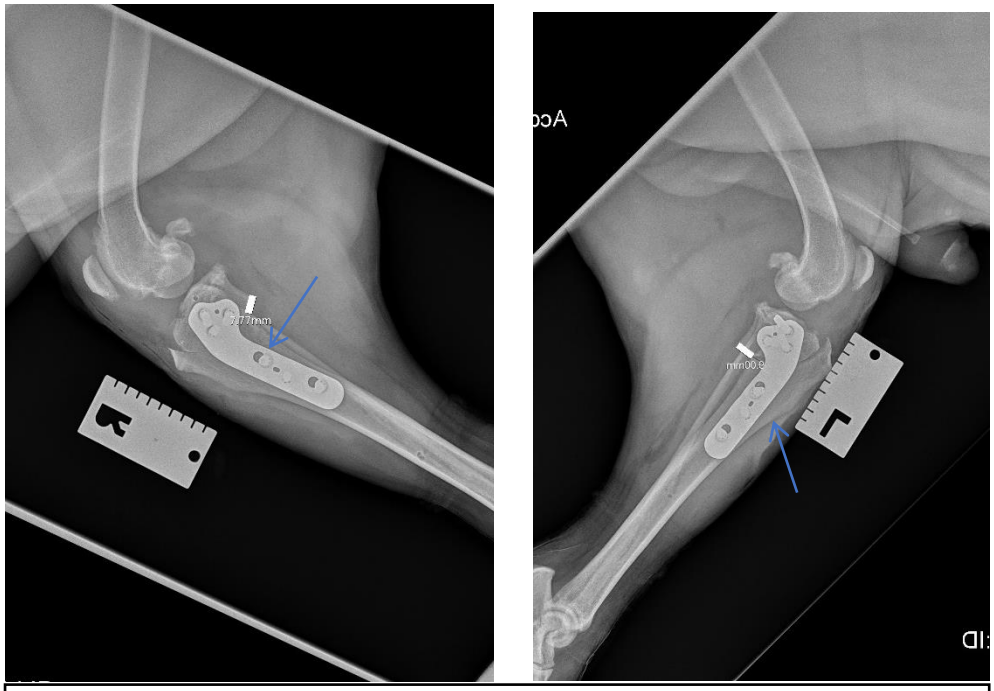
The procedure chosen was a TPLO – Tibial Plateau Levelling Osteotomy. Dogs that tear their ACLs have a large sloping angle between their thigh and shin bone, almost like they are walking in ski boots all the time.

This procedure would decrease this angle in the knee joint to a more upright position (similar to human knees) and thus eliminate reliance on the ACL to stabilize the joint.

On Wednesday 5th August, Zeus came back into Vet HQ and was prepped for his mammoth surgery.

His knee joints were opened and inspected for damage to the menisci (shock absorbers of the knee joint) and cartilage before being closed up again. A circular cut was made through the top of the shin bone and according to very specific calculations done by Dr Geoff, rotated to the millimeter to reduce the abnormal slope of the knee. A titanium plate was fixed into place to keep the bone in the rotated position and the whole surgical site flushed and cleaned before closing everything back up.

After four and a half hours under general anaesthesia and a three hour grueling orthopaedic surgery, Zeus woke up a new, bionic dog.



Arrows show titanium plate used to reduce excessive slope of knee

Recovery was difficult at first. Zeus was disoriented and in pain, which we managed with a slow drip of methadone (an opiate pain relief similar to morphine) and trazodone (an anti-anxiolytic). He was unable to stand and had to have his bladder expressed to encourage urinating. On that first night, he was not interested in eating dinner. Then on the second day, he started eating and toileting on his own, as he was more conscious of his whereabouts and had adequate pain relief. On day three, his dedicated team of nurses began physiotherapy (icing, massaging, passively flexing and extending his knees). By day four, he could walk the length of the hospital floor with minimal assistance. It was truly a miracle!

Click here to see a video of Zeus walking post surgery

Zeus went home to his owner after five days in hospital. Together with the non-government organisation Rough Edges, his owner was coached through the steps of his physiotherapy and what to expect over the next couple of months. His owner was so excited to have him back, he turned up an hour early for his discharge appointment and brought along all his friends to welcome him home.

This is not the end of Zeus' story. He will be back for stitches out in ten days and in six weeks Dr Geoff will repeat x-rays on both his knees to ensure there are no complications with the titanium plates. Just like humans undergoing hip or knee replacements, we keep regular tabs on our orthopaedic patients in the months to years after their surgeries to help with any complications should they arise.

Good luck Zeus, we're all cheering you on!

Dr Karmen