

# Long Digital Extensor Tendon Avulsion

## *Surgery Service*



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## **Anatomy**

The long digital extensor tendon attaches onto the bottom of the thigh bone (femur), runs through the knee joint and then forms a muscle located along the side of the shin bone (tibia).

## **Cause of long digital tendon avulsion**

Generally this type of condition occurs in very young large breed dogs. At this age the bones are very soft thus the long digital extensor tendon can tear out of the bone with minimal trauma. The avulsed end of the tendon always has a small bone fragment that has broken out of the femur bone.

## **Signs**

Breeds most commonly affected include Great Danes, Golden retrievers, and Labrador retrievers. Dogs develop this problem when they are typically under 1 year of age, however two reports have cited Great Danes that were 14 and 16 months of age. Clinical signs of this condition include lameness and swelling on the outer side of the knee, over the region of the avulsed tendon.

## **Diagnosis**

X-rays and physical examination findings support the diagnosis of a long digital extensor avulsion. Uncommonly, CT scan or MRI of the knee is needed to arrive at a diagnosis. Exploratory is the most definitive way to diagnose and treat the problem. In preparation for surgery, preoperative blood work including a complete blood count, chemistry profile and urine testing are recommended to ensure that your pet is healthy to under go anesthesia and surgery.

## **The day of surgery**

Please make sure that your companion has been fasted prior to surgery and that the prescribed dose of Pepcid AC has been administered. The surgeon will contact you after the surgery to give you a progress report on your companion after the surgery. Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery that will keep your companion comfortable. This will include a combination of general anesthesia, injectable analgesics, local anesthetics, oral analgesics, and anti-inflammatory medication.

## **Treatment**

Surgery is the recommended treatment option for an avulsed long digital extensor tendon in the knee joint. An incision is made on the side of the knee over the affected tendon. If the avulsion fracture is fresh (occurred within 1 week), the bone may be reattached to the femur bone with a screw. Because most avulsion fractures are chronic, the typical treatment involves suturing the long digital extensor tendon to the side of the joint capsule following removal of the bone fragment.



# Tendon Avulsion Continued...

## Results

Excellent results are achieved with surgery; however, full resolution of lameness may take 1 to 2 months. Uncommon complications that may be seen include swelling, infection and arthritis.

## Aftercare

Following surgery, the patient will receive pain-relieving medication to ensure a comfortable recovery. A combination of nonsteroidal anti-inflammatory, local anesthetics, and narcotics are used to control pain. Intravenous fluid therapy is administered to ensure that your companion will remain well hydrated after surgery. Most patients can go home on the day of surgery.

At home, the incision should be checked for signs of infection. Your pet should not lick the incision, as this could open the incision or cause infection. If necessary, an Elizabethan collar can be placed on your companion to prevent licking and chewing at the surgical site. Exercise should be restricted for about 6 weeks after surgery. Rehabilitation therapy usually can be done at home or if you prefer, by professional rehabilitation therapist.

## References

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# Tendon Avulsion Continued...

## Assessment and recommendations

Patient: \_\_\_\_\_

Date: \_\_\_\_\_

### Treatment

- Surgery is recommended by a surgeon at Michigan Veterinary Specialists
- Surgery is not recommended

### The following has been prescribed

- No medications or special diet are necessary at this time
- Narcotic: \_\_\_\_\_
- Anti-inflammatory: \_\_\_\_\_
- Other medication: \_\_\_\_\_

### Exercise

- Unlimited
- Confine your pet to the house other than very short leash walks necessary for bowel movements and urination
- Restrict exercise to leash walks 10 minutes twice daily

### Preparation for surgery

- Start fasting your companion at midnight before the day of surgery; water should not be withheld
- Give Pepcid AC 10 mg tablets: \_\_\_\_\_ tablets with water (if needed use a syringe) at 6 AM on the day of surgery

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