Luxation of Tendon of Superficial Digital Flexor Muscle

The superficial digital flexor muscle and tendon form the most superficial (closest to the skin) part of the calcanean tendon group (Achilles) and cross the tuber calcanei (bony prominence at back of ankle) as a flat tendon. Spontaneous rupture of the medial or lateral retinacular insertion of this tendon on the tuber calcanei allows the tendon to luxate (dislocate) to one side or the other (lateral luxation is most common). The injury is usually associated with vigorous activity and may be caused by **rotational force** applied to the tendon's insertion on the calcaneus. The medial insertion and retinaculum seems to be less well defined than the lateral insertion and may rupture more easily. Dysplasia of the tuber calcanei has been proposed as either causing or contributing to the luxation. The **sheltie** and **collie breeds** are over-represented, and dogs that suffer this injury may have an increased risk of suffering the same injury in the opposing hindlimb. Surgical repair done soon after injury before the development of extensive fibrosis is typically successful. If surgery is delayed chronic tendinitis and bursitis can cause marked changes in the tendon and decrease chances for success.

Clinical Signs

Lameness is not dramatic and may be intermittent. Moderate swelling on either side of the calcaneus may be noted, and a distinct popping sensation will be felt as the hock is flexed and extended. The tendon can sometimes be palpated in the luxated position and then reduced as the hock is extended. Flexion then results in reluxation.

Surgical Repair

Surgery consists of debriding (or imbricating) redundant fibrous tissue and repairing the retinacular insertion (typically with non-absorbable cruciate or mattress sutures). If insufficient retinacular tissue remains at the insertion, screws, bone anchors or bone tunnels may be required to create a prosthetic retinacular insertion.

Complications

The majority of dogs progress uneventfully following surgery, however, as with any surgery complications may arise & are detailed below, although serious complications are rare.

- Even though very uncommon, anaesthetic death can occur. With the use of modern anaesthetic protocols & careful monitoring the risk of problems with anaesthesia is minimised, but never eliminated.

- Infection is an uncommon complication as strict sterile technique is used during the surgery & antibiotics are administered during & after the procedure. Should infection occur, early detection & treatment often results in rapid resolution, although occasionally removal of the suture material/implants may be required once the tissue has healed. More serious problems may occur if infection progresses untreated or if your dog suffers infection with a multiple resistance bacteria e.g. MRSA. If you suspect an infection contact your Vet immediately. Some medical conditions will increase the risk of a post-surgical infection, such as pre-existing infection elsewhere e.g. skin & ear infections, cystitis, gingivitis etc. Pre-existing infections should be eliminated whenever possible. Some chronic infections e.g. skin & ear cannot be entirely eliminated, yet it may still be in your dog's best interests to undergo surgery despite some level of increased risk. Pre-surgical treatment will aim at minimising the level of infection.

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- Recurrence of luxation will occur if the sutures break or there is further tearing of the tissue; i.e. the weakened tissue may not be strong enough to hold sutures.
- Excessive early activity will significantly increase the risk of tissues tearing/sutures breaking.
- Even after the retinacular tissue has healed it is still important to have a controlled, gradual increase in activity, similar to human patients undergoing rehabilitation following surgery. If activity in dogs is increased too quickly after surgery straining /tearing of tissues may occur.

AFTERCARE OF YOUR DOG FOLLOWING SURGERY:

Your dog should be kept confined (ideally to a large cage or alternatively a single room with **non-slip** flooring) to restrict activity. Short **leash** walks in the garden (a few minutes four to six times daily) are recommended to allow toileting. Confinement should be maintained at all times for first six weeks following surgery.

A splinted bandage will be maintained for the first three to four weeks after surgery and must be kept clean and dry. The bandage may be changed within several days of surgery. Subsequent bandage changes will be scheduled at five to seven day intervals, although sometimes more frequent changes are required.

Six weeks following surgery commence lead walking; approximately 10 minutes at a time two to three times daily, increasing duration by approximately five minutes weekly.

Hydrotherapy is beneficial to recovery but should only be performed in a centre with qualified personnel. Hydrotherapy may commence at six weeks post surgery.

Off leash activity may be gradually reintroduced four months following surgery. It is inadvisable to allow off lead activity prior to this.

DECLARATION:

I have read the information contained herein (2 pages - please sign each page) & am satisfied I have a sufficient understanding of the procedure my dog is scheduled to undergo, including potential complications that may occur & requirements for aftercare following surgery.

I hereby consent for my dog …….. to undergo surgery.

Owner's signature: Witness:

Print name: Print name:

Date: Date:

PLEASE SIGN EVERY PAGE - Email to forms@bonevet.co.uk or FAX to 0800 098 8245

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