



## VETERINARY VOICE: Tips of the Trade

### **SURGERY - Superficial Digital Flexor Tendon (SDFT) Luxation**

**Anatomy and Function of the SDFT**

The superficial digital flexor tendon forms the most superficial part of the calcaneal (Achilles) tendon and travels over the tuber calcanei as a flat tendon and then splits into branches for each toe. The action of the SDFT muscle/tendon is flexion of the digits, extension and fixation of the tarsus and flexion of the stifle joint. It has a firm retinaculum on both the medial and lateral aspect of the calcaneus that maintains its position in the calcaneal groove.

**What is the injury and how does it happen?**

SDFT luxation occurs when there is a rupture to the medial or lateral retinaculum. It is most commonly associated with vigorous activity and a rotational force applied to the calcaneus. The medial retinaculum is less fibrous and therefore more prone to tear, although the injury can occur on either side.

**How do you diagnose it?**

Dogs will usually present with an acute onset of a weight bearing hind limb lameness. There is swelling at the tarsus most commonly at the proximal aspect of the calcaneus. With the tarsus in extension, the SDFT can be luxated to the side opposite the tear. Often there is a popping that can be palpated and/or heard when the tendon is luxated. Radiographic findings are soft tissue swelling at the tuber calcanei.

**What is the recommended treatment?**

Surgical repair of the tear in the retinaculum is advised. The skin incision is made on the side of the tear. The bursa is opened and fibrous tissue removed. The SDFT is reduced and stabilized by using non absorbable monofilament interrupted sutures placed from the edge of the tendon to the adjoining retinacular tissue. If the injury is long standing or there is not enough tissue to imbricate, sutures can be placed through bone tunnels drilled into the calcaneus. Conservative treatment consisting of rest +/- external stabilization with splint is not advised.

**Post-operative care**

A lateral side splint with the tarsus in slight flexion is placed for 6-8 weeks. Strict rest is required while the pet is in a splint and for two weeks after splint removal. Pain management is provided as indicated.

**Questions?**

The Veterinary Specialty Center of Tucson has board-certified surgeons available for questions and consultations on surgical conditions during the weekdays. A member of the surgery team is on-call 24/7 to provide consultations to VSCT emergency doctors and to perform emergency surgery for patients seen by the VSCT emergency service. Board-certified surgeons have four additional years of training are certified by the American College of Veterinary Surgeons to assure competency in advanced veterinary surgery.

**Surgical Experts:**

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