**Superior Check Ligament Desmotomy**

The superior check ligament (the accessory ligament of the superficial digital flexor muscle), which inserts on the caudal surface of the radius, functions in the stay apparatus in the horse. Together with the inferior check ligament (the accessory ligament of the deep digital flexor muscle), it prevents overextension of the fetlock during weight bearing.

**Indication**

Superior check ligament desmotomy was initially described as a surgical treatment for metacarpophalangeal

flexural deformities in young horses but now it is used in cases where the SDF appears to be the most involved structure, It is now indicated as a treatment for superficial digital flexor tendinitis in racehorses. The rationale for the surgery is that it interrupts the transfer of the weight-bearing load on the tendon to the distal radius, bringing the muscle and tendon proximal to the superior check ligament (and therefore enhanced elasticity to the functional unit) into use during weight-bearing. The surgical technique is similar to the Inferior Check Ligament Desmotomy but the approach is more caudal. In addition, the closure of the medial wall of the flexor carpi radialis sheath facilitates elimination of dead space and minimizes the potential for hematoma formation

and adhesions.

**Surgical Preparation**

Surgery is performed with the patient under general anesthesia and either in lateral recumbency with the affected leg down or in dorsal recumbency with the leg suspended. The latter position is preferable in terms of hemostasis. The leg is clipped from midradius to midmetacarpus. The medial side of the antebrachium is surgically prepared.

**Procedure**

A 10-cm skin incision is made cranial to the cephalic vein, over the flexor carpi radialis tendon and extending from the level of the distal chestnut proximad. The fascial sheath of the flexor carpi radialis is incised and Gelpi retractors are placed to expose the medial wall of the sheath, which adheres to the superior check ligament. A stab incision is made through the craniolateral wall of the sheath and superior check ligament. The incision is continued proximad and distad to sever the ligament completely. The incision in the flexor carpi radialis sheath is closed with a simple continuous pattern using 2-0 synthetic absorbable material. The antebrachial fascia and subcutaneous tissue is closed with a continuous suture of 2-0 synthetic nonabsorbable material. The skin is closed with interrupted sutures of 2-0 nonabsorbable material.

**Post Op.**

A sterile dressing is placed over the incision, and a pressure bandage is applied. Phenylbutazone is administered postoperatively, but antibiotics are not used routinely. Sutures are removed at 12–14 days, and bandaging may be discontinued 3–4 days later.

**Complications**

May predispose these horses to developing suspensory desmitis.

Increases strain on the superficial digital flexure tendon and suspensory ligament and might predispose the horse to other injuries.

**Prognosis**

The prognosis in Standardbred racehorses appears to be slightly better for returning to athletic performance than that for Thoroughbreds, although the results are highly varied. The prognosis for Thoroughbred

racehorses is generally lower.