



Fasciotomy and Neurectomy of the Deep Branch of the Lateral Plantar Nerve in Horses

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LIGAMENT: A STRONG, FLEXIBLE, CONNECTIVE-TISSUE BAND THAT JOINS BONE TO BONE

DIAGNOSIS

Suspensory ligament injuries in the horse make up a large majority of lameness cases we see. While these injuries are most commonly seen in sport and show horses, any horse is susceptible to this type of injury. Lameness attributed to injury to this structure can become chronic, with a high rate of recurrence. The suspensory ligament is responsible for preventing over-extension of the fetlock joint during the period of increased weight-bearing. The best example of this would be landing from a jump. The suspensory ligament can be torn or damaged when excessive strain is placed on the ligament due to increased exercise, muscle fatigue or chronic degeneration. Proximal Suspensory Ligament Desmitis (PSLD) is inflammation within the upper-third portion of the suspensory ligament. When the suspensory ligament becomes inflamed, it swells. The ligament is surrounded by bands of connective tissues (fascia) and tendons. Due to the structure of the hind limb, these do not allow for the suspensory ligament to swell, which in turn can become very painful.

TREATMENT

While injuries to the proximal suspensory ligament (PSL) can often be treated conservatively, some injuries (both acute and chronic) may benefit from surgical intervention. A fasciotomy performed alone or in combination with neurectomy of the deep branch of the lateral plantar nerve is currently the preferred surgical option for treating certain PSLD. A 4-6 cm incision is made just below the hock. The band of fibrous tissue surrounding the suspensory ligament is cut, releasing the pressure on the ligament. Following

this and in cases where deemed appropriate, a neurectomy of the deep branch of the lateral plantar nerve is performed. This procedure is done under general anesthesia and takes approximately 20-45 minutes.

PROGNOSIS

While prognosis is highly dependent on the severity of the case and conformation of the hind limb, about 80-85% of cases return to soundness, with the majority of those returning to athletic activity.

SAMPLE REHABILITATION SCHEDULE

Every horse is different and every rehabilitation schedule is tailored to meet your horse's specific needs. Below you will find an example of a rehabilitation plan for a horse post-fasciotomy/neurectomy surgery:

Fasciotomy/Neurectomy:

Two weeks strict stall rest

Four weeks of stall rest with walking in-hand

Recheck exam at four to six weeks post-operation

CONTACT

For more information, please contact the Equine Sports Medicine and Surgery Service at hlaspportsmedicine@tufts.edu