

Treatment Options For Hind Suspensory Injuries

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Proximal suspensory desmitis is inflammation in the proximal portion (upper part) of the suspensory ligament. It commonly affects athletic horses of varying disciplines and can be a source of acute or chronic lameness and poor performance. It is also a source of frustration for owners. There are suspensory ligaments in both the front and hindlimbs, all of which can be easily injured in athletic horses. The hindlimb suspensory ligament is uniquely different from the forelimb suspensory ligament due to its anatomy. The hindlimb suspensory ligament is tightly bound by the splint bones, canon bone and is covered in a thick fascia. The nerves that supply the suspensory ligament may become damaged when the ligament is inflamed due to this tight compartment the suspensory ligament resides in. The diagnosis of proximal hindlimb suspensory desmitis is based on lameness examination, diagnostic analgesia (nerve blocks) and imaging. The hindlimb suspensory ligament can be difficult to isolate with a nerve block alone due to its close nature to the distal hock joints which may inadvertently be blocked with a suspensory ligament block. Ultrasonography is often performed in order to diagnosis injury to the ligament. X-rays, MRI and nuclear scintigraphy may also be used to aid in diagnosis.

Treatment of proximal hindlimb suspensory desmitis is often more involved than a similar injury in a forelimb suspensory. The most commonly pursued treatment is a period of rest and restricted exercise followed by a rehabilitation program that gradually increases exercise. There is only a small portion of horses that will respond to this treatment alone. The horse often initially improves after prolonged rest (6 months rest), however the lameness often recurs as the workload increases.

Extracorporeal shock-wave therapy focuses a rapid pulse of pressure on a targeted area aiding in healing and decreasing pain. This is commonly done as a series of treatments, typically 10-14 days apart and is used in conjunction with rest. Depending on the type and severity of the lesion a larger portion of horses will respond to this therapy when compared to rest alone and will return to work in a shorter period of time.

A newer therapy incorporates injecting medication into the lesion of the suspensory ligament or injecting it around the ligament. This is thought to decrease inflammation and speed the healing process. This

therapy is used in conjunction with rest and/or shock wave therapy. The medications currently being used are IRAP, PRP and stem cells. Depending on the type of injury the medication chosen may depend on veterinarian preference. There is little evidence in the literature at this time that describes a particular medication working over others. There has been some success with returning horses to athletic function sooner based on rest alone. Some reports have shown a return to work within three months. Using this therapy is case dependent and can be quite costly.

Hindlimb suspensory desmitis can be treated surgically. The ideal candidate for surgery are horses that have a mild to moderate degree of hindlimb lameness and horses in which the disease is more acute (1-6 months). The horse is placed under general anesthesia and the nerve supply to the suspensory ligament is dissected and a portion removed. In most cases the fascia surrounding the suspensory ligament is also opened creating more "space" for the suspensory ligament to heal. Often PRP or stem cell therapy can also be performed at the time of surgery. After surgery the horse undergoes a rest period with gradual increase in exercise over approximately 2-3 months, depending on their recovery. Studies have shown that surgery increases the horse's ability to return to athletic function faster compared to a rest and rehabilitation program. It has also been found that these horses have a better prognosis long term. It is however, the most invasive treatment option and requires the horse be placed under anesthesia.

Although it is always an unpleasant thing to hear your veterinarian say the 'suspensory' word, there are several different treatment options available all of which have some success. It is important to consult with your veterinarian to determine the best therapeutic options available for your horse. Hindlimb suspensory desmitis can be difficult to manage and rest alone often isn't as successful at returning horses to work at the same level as pre-injury. New treatment modalities such as shock wave, stem cell therapy, PRP, surgery or a combination of the above should be considered to improve long term soundness.

