

### What is Suspensory Ligament Disease?

Few conditions in the horse are as difficult to manage as suspensory ligament disease, particularly, degenerative suspensory ligament desmopathy/desmitis (DSL/D). It results in a characteristic drop of the fetlock and laxity of the suspensory ligament. The exact cause is not known but the effects are devastating for many horses.

Some basic anatomy review of the equine limb is needed to fully understand the degree of severity that can accompany tendon and ligament conditions in horses. The horse's bone structure is much different than a human in that the horse essentially walks on our middle finger and the tendons and ligaments that allow us to curl our finger into the palm of our hand represent the flexor tendons and suspensory ligaments of the horse. In the horse, these tendons and ligaments are absolutely vital to allowing the horse to move and articulate the leg.

Without the tendons and ligaments supporting the bony column of the leg, the horse would fall down. To specifically look at the suspensory ligament, it is a soft tissue structure that runs between the back of the carpus (front leg) or hock (hind leg) and the sesamoids bones at the back of the fetlock below. The main function is to support the back of the fetlock and allow the horse to maintain the fetlock joint from coming in contact with the ground. When a horse is affected by a suspensory ligament degeneration, the ligament lengthens and become more lax which results in the fetlock dropping





and in severe cases, contacting the ground. This degeneration causes pain and discomfort for the horse as well.

Degenerative suspensory ligament desmitis is often found in both hind legs and occasionally in the forelimbs as well. It is seen in all ages of horse but often in mid-age to older horses and can affect geldings or mares. It is thought to be closely related to a human condition called Ehlers-Danlos Syndrome which is a disease of the connective tissues of the body.

It is thought to be a genetic disease similar to humans as well. The most characteristic symptoms of the disease in the horse is the dropped fetlock in both hind legs.

Unfortunately, there is no cure or treatment at this time. Management includes anti-inflammatories, corrective farrier work including wedge shoes and shortened toes, restricted exercise/retirement and MSM (methyl-sulfonyl-methane) supplementation can be helpful to horses with DSLD to improve connective tissue condition.

**If you suspect your horse may have this condition, contact your equine veterinarian to help review the condition and examine your horse so appropriate management can begin.**

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