

Daniel P. Keenan, DVM

Lynsey D. Makkreel, DVM

Talia M.A. Lin, DVM



CONTRACTED TENDONS

The term 'contracted tendons' describes a condition where the leg is excessively straight, usually at the fetlock or coronary band, but it occasionally also affects the knees. If the condition is very severe the horse or foal may be unable to stand properly.

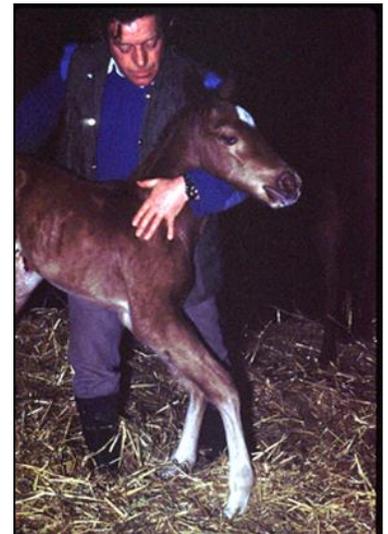
How does it occur?

There are two general forms of contracted tendon, congenital and acquired. In the congenital condition, foals are born with contraction of one or both forelimbs. It less commonly affects the hind limbs. The foal may be born with a degree of limb abnormality which can range from just being too straight in the pastern severe contraction that requires assistance to stand.

In the acquired form, the affected individual is usually born with normal conformation and the contracture develops during a period of rapid growth or as a result of injury. This latter form most commonly affects the fetlock and pastern joints, and rarely the knees. There is often pain associated with the contraction.

What can be done?

In young foals, the principle of treatment is to keep the foal's leg straight enough for it to walk on its toe and then stretching and correction will follow. Veterinary attention is necessary without delay. Specially padded wrap-around splints may be applied to hold the fetlock, pastern and toe forward. These must be applied carefully and removed and replaced frequently to avoid the development of pressure sores and also to enable assessment of the conformation of the limb. Standing or exercising the foal on a hard surface is essential to aid stretching and to allow the foal to move about without hindrance from bedding. Foals with one leg only affected must be encouraged to suck from both sides of their mother or they will tend to rest the abnormal leg, delaying recovery. Some young foals with contracted tendons are helped by an injection of a very large dose of oxytetracycline antibiotics. This appears to work by the alteration of calcium metabolism or calcium availability in the tendons.



Newborn foal with contracted tendons

Daniel P. Keenan, DVM Lynsey D. Makkreel, DVM Talia M.A. Lin, DVM

183B Bordentown Crosswicks Rd, Crosswicks, NJ 08515

Ph: 609-291-0535 Fax: 609-291-8899

www.foundationequinenj.com info@foundationequinenj.com



Foal's leg splinted to correct contracted tendons.

In acquired cases associated with a rapid growth 'spurt', dietary restriction to slow growth rate is often successful. This involves reducing energy intake while maintaining intake of a good quality multivitamin, mineral and trace element supplement, while the ration is being restricted. There are several good quality specifically formulated supplements now commercially available. Attention to hoof shape is also essential.

In young foals with so-called 'ballerina syndrome', where they suddenly go up on their toes, heel pain caused by bruising is usually involved. It is essential to examine foals daily for conformational changes during these conditions. Any foals that go straight or up on their toes should be examined immediately. Many cases, if managed early in their development, will return to normal conformation very quickly.

If not managed early, upright feet will progress to 'boxy' or 'club' feet and permanently upright legs, which may then require attempts at surgical correction.

In severe cases, or in cases that are unresponsive to conservative treatment, surgery maybe indicated but must be chosen carefully. The inferior check ligament, the superior check ligament the deep digital flexor tendon may need to be cut and success for these cases is not always so good. Surgery must be followed by bandaging, splinting or casting and requires a lot of aftercare

What can be done to prevent the condition?

In most instances, congenital cases will occur either as a result of positional 'molding' effects when the foal is in the mare's uterus or as a result of developmental abnormality. It is difficult to suggest steps that will ensure this type of contracture does not occur. Nevertheless, ensuring that the mare is not overfed and that she receives a good balanced diet and is exercised normally during pregnancy will help to ensure that the foal is born in optimal condition. In older foals and yearlings it is important to encourage regular rates of growth, avoiding extremes of diet and exercise or attempts to "push" the foal. Regular inspection and early managerial adjustment when abnormality is noted is essential.



Foal with contracted tendons "knuckling"