# TENDON ISSUES OF NEWBORN CALVES

by Dottie Love

After an uneventful gestation and a normal delivery, your cow delivers a calf. As he struggles to his feet, you're shocked to see his legs aren't straight.

The problem appears to be from his front knees down. The joints seem either too tight or too loose; the calf may even be standing on the fronts or backs of his pasterns.

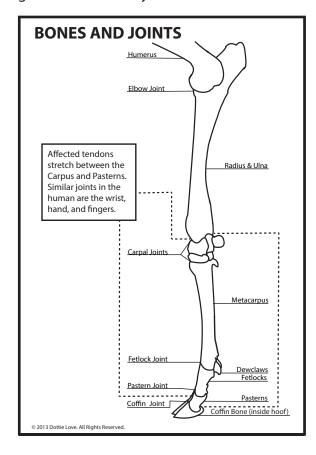




This newborn has contracted flexor tendons.

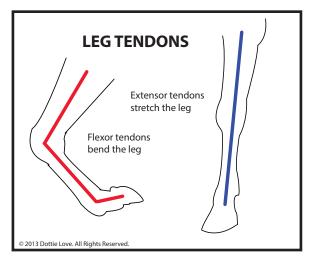
This newborn has lax extensor tendons.

Both these conditions signify that the tendons that control muscle movement—flexion and extension—are either contracted or lax. Contracted Flexor Tendons is the most common congenital abnormality of cattle. Lax extensor tendons are also very common.



### **DIAGNOSIS**

At birth, front leg joints are bent in the wrong direction forwards or backwards. The joints are not locked or rigid, but are either too relaxed or too constricted. Gentle manual flexion does not cause undue pain.



#### **CAUSES**

There are four possible causes. Most cases are genetic in origin; both parents must be carriers of a recessive gene. The calf's position in the uterus may also affect the degree of disability. Some cattle breeds known for large calves (such as Belgian Blues) have an extremely high occurrence of tendon problems. Also, the dam's consumption of toxic plants during pregnancy can cause this and other congenital abnormalities.

Nutrition has not been implicated; however, it is important to consider other conditions that may resemble tendon problems. The calf should be evaluated for signs of White Muscle Disease, Weak Calf Syndrome, and Arthrogryposis. Consult your vet to learn how to identify the symptoms. These conditions are rare but life-threatening and require immediate care.



This calf requires no intervention and should be normal within a week. Every step he takes will help to normalize his tendons



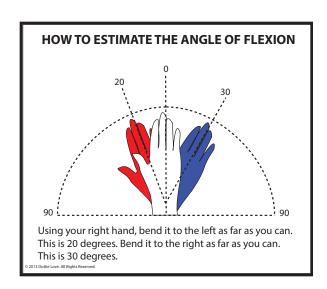
Careful observation is required for this calf. He and his dam should be housed in a comfortable and clean pen safe from predators.

### **TREATMENT**

Most cases are mild and self-correct as the calf exercises. Daily improvement is usually seen and the condition resolves within a few weeks. Frequent manual extension of the joints to stretch the tendons, ligaments, and muscles aids in treatment. If the calf is putting pressure on other areas of the legs, inspect them frequently for abrasions that may cause secondary infections. Keep him with his dam in a protected pen with a soft surface.

Mild cases are characterized by up to a 20 degree deviation.

An angle of up to 30 degrees constitutes a moderate case.



If the calf can't walk or stand to nurse, consult your veterinarian. He or she may recommend temporary splints. They will support the calf's legs and force him to bear weight on his toes. However, splinting does not allow the tendons to strengthen and will delay progress. The splints can be constructed from a PVC pipe cut in half lengthwise. Smooth the edges. Pad the splints and wrap carefully so the circulation isn't impeded. Remove the splints daily to avoid pressure sores and allow the calf to exercise his legs.



Contracted tendons at 8 days



Splints applied that day



10 days later

A plaster cast may also be indicated in some cases. Your vet may decide to perform corrective surgery if improvement is not seen in several weeks.

## **LAX EXTENSOR TENDONS**

All these calves' legs straightened quickly without treatment.



Bull at 3 hours; improved in 1 week; shown at 6 weeks





Heifer at 6 hours and 2 weeks





Heifer at 1 day and 3 weeks



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#### **PLEASE NOTE:**

I am not a veterinary professional. Please consult your veterinarian before making any decisions or taking any action. Thanks for reading!

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