Stringhalt in a Horse

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Stringhalt in a Horse. On Oct. 5, 1943, a 9-year-old, brown, riding horse was brought to the veterinary clinic with history and symptoms of stringhalt. When the patient moved at any natural gait, the left hind leg was flexed so that the hoof closely approximated the body. This condition may be defined as an involuntary flexing, affecting one or both posterior limbs. The limb is lifted with excessive suddenness and beyond normal flexion. Numerous investigators in their study of this myoclonic condition have advanced various theories in regard to the possible etiology. These factors are based on the various findings of the individual investigators. Some of the most logical ones are: an abnormal development of the spine of the tibia, some pathological condition of the nerves and muscles of the limb, a pathological condition of the great sciatic nerve such as a chronic inflammation or infiltration with blood, straightness of the hocks, contraction of the peroneus muscle, localized sclerosis of the spinal cord, and inflammation of the hock or stifle joint. Of all these probably the most logical one is some irregularity in the nervous mechanism of the involved limb.

Types of Stringhalt

Various authorities have given different classifications of stringhalt. Probably the most logical classification is into idiopathic and symptomatic forms. The idiopathic form includes those cases in which there is no visible cause. The symptomatic form includes those cases in which the cause can be detected.

The defect is easy to detect and the only difficulty met is the possibility that it might be absent at the time of examination. The excessive flexing and the bringing of the foot to the ground with great force may be demonstrated while trotting and sometimes while walking. It tends to persist in spite of work, but at times it will disappear. Generally it returns with rest. Occasionally the symptoms are only manifested when the patient is turned in small circles or is moved from side to side.

The treatment indicated for this condition is a tenotomy of the lateral digital extensor on the lateral surface of the metatarsal bone at a point below the lower limit of the sheath of the tendon and above the point at which the tendon joins the tendon of the long extensor. The operative area is 3 to 4 cm. in length, measuring upward from the point of union of the two tendons. Local anesthesia is obtained by the infiltration of the surrounding tissues with a 2 per cent procaine hydrochloride solution. The operation may be performed on quiet animals in a standing position by the use of local anesthesia and a twitch.
or the patient may be restrained on the
ground or on a table in a lateral recum­
bent position with the affected leg upper­most. The operative area is prepared by
shaving and disinfecting the skin. The
thumb is used to displace the tendon back­
ward and at the same time tense the skin
along the anterior border of the tendon.
Next with a sharp-pointed knife, an inci­
sion is made about ¼ in. long through the
skin and fascia. The incision is made
parallel to the tendon and the knife is ad­
vanced between the deep fascia of the
tendon and the bone. After a tract is
established by rocking the handle, the
knife is removed and a blunt pointed teno­
tome is inserted. The cutting edge of the
tenotome is turned toward the tendon
which is divided by cutting toward the
skin while the foot is flexed. The wound
is closed by one suture or by using collod­
ion to cover it.

Controversial Question
Some clinicians think the operation is
more efficient when a portion of the tendon
is removed. Others believe that removing
a portion of the tendon is of no advantage
and delays healing. In this type of surgery
the incision is enlarged and by the use of
a forceps the tendon is drawn out through
the incision. This is accomplished by hav­
ing the hoof extended. Then with either a
scissors or knife a portion of the tendon is
removed.
This method of surgery brings relief if
the condition is due to the spasmodic con­
traction of the lateral digital extensor
muscle. However, only about 30 per cent
of the stringhalt cases are due to this con­
dition. This surgical procedure is not
practiced when it is known that the condi­
tion is the result of some definite cause
such as spavin, gonitis, or cracked heels.
Some veterinarians do a tibial neurectomy
for this condition, but as a whole this has
not been very satisfactory.
Early healing results if the instruments,
operator’s hands and dressings are sterile.
Following the operation the patient should
be rested for 10-14 days. After this, the
patient may be turned loose in a box stall
or exercised slowly on soft ground.

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X-ray Diagnosis of Foreign Body.
On the 21st of October a five-year­
old sorrel saddle mare was admitted to
the Stange Memorial Clinic. This horse
had a history of having kicked through a
window during an attack of colic about
5 weeks previously. At this time the pa­
tient had suffered several small lacer­
tions on the medial side of the right rear
leg about 3 inches above the fetlock.
The owner reported that there had been
quite profuse bleeding from these lacer­
tions; it had seemed to him that a rather
large artery had been cut.
The horse had been allowed to stand
in the stall for 5 weeks following the in­
jury. The Sunday previous to bringing
the animal to the clinic the owner took
her out for a short ride. After having
gone only a short distance the horse be­
came severely lame on the right rear leg.
Upon arriving at the clinic there was
some swelling and she showed moderate
sensitiveness of the affected fetlock, but
no lameness. It was noticed, however, that
while standing in the stall she put very
little weight on the leg.
Two x-ray pictures were taken of the
affected part, one a lateral view and one
a posterior view. Nothing of any signi­
ficance was found. The following day 2
more pictures were taken, both at an obli­
que angle. These latter 2 pictures show­
ed a foreign body about 3 inches above
and posterior to the proximal sesamoidian
bones. Upon close observation it seemed
that there were 2 small objects, one super­
imposed upon the other.
Preoperative Procedure
The following morning the area was
shaved and a mercury bichloride pack,
1:1000, was bandaged over the area. The
next morning the horse was given 1 ounce
of chloral hydrate with the use of a stom­
ach tube and placed on the operating table.
The operative area was infiltrated with 2
percent procaine solution. The x-ray plate
was superimposed on the leg and the lo­
cation of the foreign object found in that
way. A small incision was then made over
the indicated area. Imbedded in the tis­
ues about ¼ inch beneath the skin were
found 2 pieces of glass, one rectangular

—E. J. Janson, '43

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