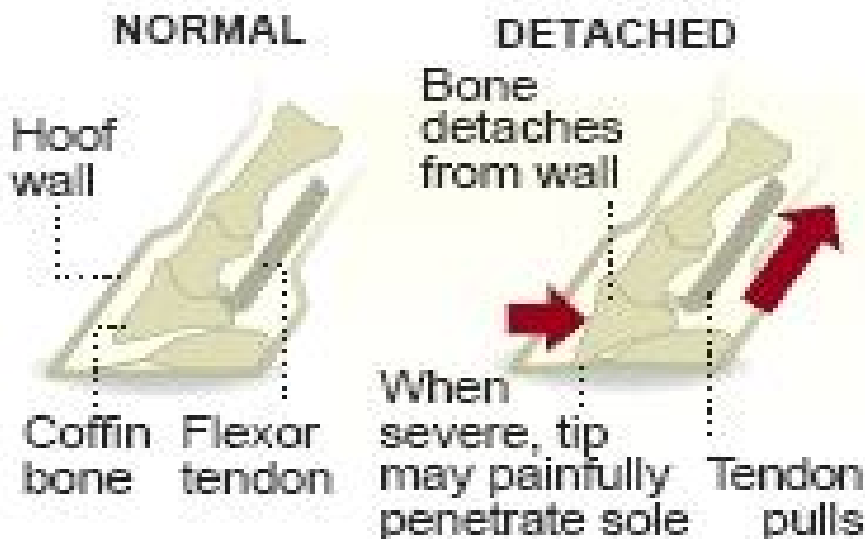


Laminitis & founder

Definition :

laminitis is an ischemic non infectious systemic disease in the hoof in which the connective tissue layer of laminae (pedal bone) between the hoof and coffin bone (3p) become inflamed.

Founder occurs when the bond between the sensitive and insensitive laminae completely fails, as the laminae die. This causes the attachment of the coffin bone to the hoof to break down, damaging arteries and veins and crushing the remaining living tissues around the coffin bone. In extreme cases, as the whole weight of the horse bears down on the coffin bone, it will rotate downwards and through the sole of the hoof to the ground.



Causes:

1-over consumption of carbohydrates rich grain which accumulated in hind gut and fermented in cecum causing changes in microbial climates and proliferation of lactic acid bacteria which kill benefit bacteria that ferment fibers causing liberation of endotoxins in bloodstream which disrupt normal blood flow in the hoof causing laminitis.

2-Equine metabolic syndrome . for more information [click here](#).

3-consumption of large amount of cold water after exercise.

4- Endotoxins developed after serious colic .

5-untreated infections such as(retained placenta-abortion-endometritis-chronic enteritis).

6-[cushing's disease](#) (pituitary dysfunction).

7-prolonged uses of high doses of corticosteroids.

8-bedding containing black walnut shavings.

Diagnosis:

clinical signs:

1-increased body temperature.

2-A pounding pulse in digital palmar artery.

3-anxiety,horse try to stand on hind limbs more than fore limbs.

4-visible trembling.

5-profuse sweating.

6-flared nostrils.

7-walking very tenderly, as if walking on egg shells, or on fire.

8-lameness.

9-tendency to lie down.

10-increased temperature of sole, coronary band of hoof.

prognosis:

the earlier diagnosis and treatment the faster recovery process can begin.

Treatment:

1-cooling the hoof(feet placed in ice slurries)

2-keep the horse lie down to relieve pressure on the hoof.

3-withholding feeding of carbohydrates rich grains.

4-treating with mineral oil (*R/. liquid paraffin*) via nasogastric tube to limit the absorption of bacterial toxins.

5-i/v fluid therapy.

6-administration of painkillers and/or anti inflammatories(NSAIDs) as (*R/ RIMADYL TM*)



7-administration of antibiotic to fight infection as(*R /norodine equine oral paste*). , anti endotoxins to reduce bacterial toxicity , anticoagulants and vasodialators to improve blood flow to the feet.



8-use of amagnetic hoof pad to increase local circulation and help relieve pain.

9-bedding stable with sand or soft wood shaving.

10-corrective shoeing to prevent founder.

11-draining of blood from digital palmar arteries.

Prevention and control of laminitis and founder

- Avoid feeding excesses and keep the horse at a reasonable weight.
- Watch for and avoid grass blooms on pastures. Pull the horse off the fields and onto a dry lot if necessary. Feed hay in the morning and turn the horse out after dew has evaporated from

the grass.

- Keep grain in closed bins and the door to the feed room closed.
- Give the horse unlimited access to fresh, clean water, except immediately after exercise, when the amount should be regulated.
- Make changes to routines slowly and progressively, to avoid stress.