

Grass sickness explained



Vet **Kirstie Pickles**, from Scarsdale Vets, part of the XL Equine Group, advises on how to recognise this rare but life-threatening condition and what treatments are available

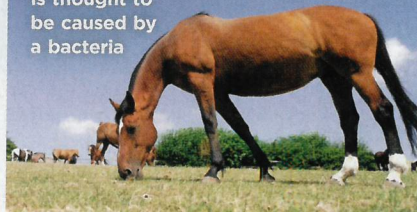


In chronic cases, the gut is paralysed leading to severe weight loss

PHOTO: ANIMAL HEALTH TRUST

The condition

Grass sickness is thought to be caused by a bacteria



Equine grass sickness is a condition that affects the nervous system, paralysing the gut.

As its name suggests, it's a disease that affects mainly grass-fed horses and was first reported in the 1920s when horses played a big role in agriculture. Farmers noticed that hundreds of horses seemed to be dying annually from a colic-like, wasting disease.

There's no definitive cause for grass sickness, but the theory with most evidence is that a toxin from the bacterium *Clostridium botulinum* is responsible. This bacteria is naturally found living in soil and inside the horse's gut, but it's thought that certain unknown conditions trigger the bacteria to overgrow and release a toxin in the gut, causing paralysis.

When it strikes, grass sickness usually affects young horses between the age of two and seven, and is most prevalent between April and June, with a peak in May.

Stress, soil disturbance and having grass as sole forage are all thought to be risk factors for the condition.

Symptoms & diagnosis

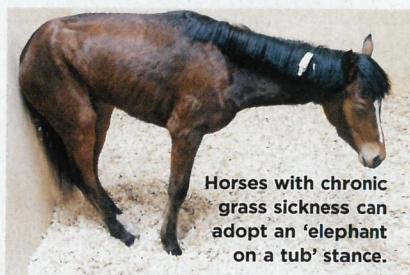
Grass sickness is divided into three types: acute, subacute and chronic.

In acute cases, horses will present with colic and a very high heart rate and may also have abdominal distension, with no gut movement. Horses seem depressed, have drooping eyelids and may suffer from constipation. The horse may also be very sweaty and have dry faeces

covered with sticky mucus in its rectum. All acute cases die within 24 hours.

Symptoms of subacute grass sickness are less severe, but similar. No horses with subacute grass sickness have been known to live longer than several days.

Chronic cases are considered as horses that survive longer than four days, and present less severely with



Horses with chronic grass sickness can adopt an 'elephant on a tub' stance.

PHOTO: PROF BRUCE MCGORUM

symptoms that include depression, a high heart rate, difficulty eating, lack of appetite, snuffly breathing and colic. Horses will also experience severe weight loss, trembling muscles, patchy sweating and droopy eyelids.

There's no formal test for diagnosing grass sickness and it is usually based on symptoms, but a biopsy of the gut can confirm it.

Prevention

Grass sickness is prevalent on Scotland's east coast, and horses that live here, and other areas where grass sickness has occurred, are at high risk, with an estimated 1 in 200 dying annually of the disease.

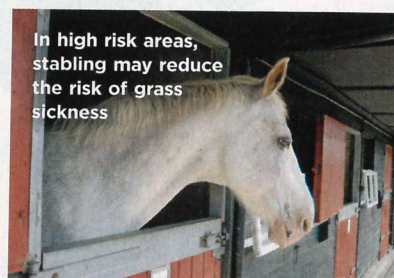
In these areas, prolonged dry, cold spells of weather, with temperatures ranging between 7-11°C have been associated with grass sickness. Under

these conditions, stabling your horse may help to reduce the risk. Only a couple of cases have been reported in stabled horses.

In places where the disease is uncommon, the risk can be further reduced by bringing your horse in for part of the day. Giving him hay - either in the stable or field - to eat instead of grass may have a protective effect.

Limiting the amount of stress your horse is put under, such as travelling or moving yards, may also reduce the risk. Stress reduces the body's immune responses, making it harder for a horse to fight off, and recover from, anything that ails him.

Scientists are currently researching whether a vaccine can prevent or reduce the risk of grass sickness.



In high risk areas, stabling may reduce the risk of grass sickness

Treatment



Walking out on a lead rope is all part of the recovery process

The options for acute and subacute cases of grass sickness are limited.

No horse with this severity of the disease has ever survived and horses either die or are euthanised within 24 to 48 hours. Chronic cases of grass sickness are treatable, but require very intense nursing. Up to 60% of chronic cases that receive dedicated intensive nursing may survive and most horses

return to their original fitness, but this can take up to 18 months.

There's no specific therapy, but hand feeding, grooming and walking out on a lead rope can help horses to recover over time.

In the initial stages, feed needs to be a sloppy, gruel-like mixture. Grass sickness makes swallowing very difficult, so foods like watery sugar beet

and molasses are good because they can be easily ingested and have a high energy content. Grated apples and carrots are easy to swallow so try offering these to encourage horses to eat. During recovery, horses will eat little hay, so soaked alfalfa cube mashes can be an effective way to ensure that your horse is getting enough fibre.

"MY HORSE COULD ONLY TAKE FLUIDS THROUGH A SYRINGE"

When Arty, a 15hh Arab gelding, was diagnosed with grass sickness in May 2014, vets thought his chances of survival were so slim that they advised to put him down straight away. But owner Samantha Moody wasn't prepared to lose her four-year-old without a fight.

"Arty was only given a 5% chance of lasting three days," Samantha says. "But I chose to go with my horse and fight with him while he still had a light in his eyes."

Against the odds, Arty surpassed the vets' expectations and made it through the first three days despite developing rhinitis, a condition that hindered his breathing and suppressed his appetite.

"I was with him almost 24/7," explains Samantha. "I'd be feeding and checking him every hour, night and day. We often slept through the early hours of the morning after his midnight feed, curled up together in his stable."

"He couldn't eat or drink unassisted, and was given all of his fluids hourly by syringe."

Samantha's persistence and dedication to Arty saw him gradually improve over time and 24 weeks after diagnosis, she finally left him for a whole night.

Since this time, Arty's gone from strength to strength and is now preparing to start a career in eventing after succeeding in affiliated one-day events this year.

Samantha says: "A slow build-up of gentle work over the last 18 months has given me an amazing, talented young horse and an unbelievable bond."

Meet more grass sickness survivors online at www.yourhorse.co.uk/grassickness



Vets only gave Arty a 5% chance of surviving



Two years later, Arty's enjoying a full and active life

PHOTOS: SAMANTHA MOODY

Call the vet

If you suspect your horse has grass sickness, you should call your vet as soon as you notice any symptoms, as it can often be mistaken for colic. For more advice visit www.grassickness.org.uk