

Equine seizures:

Seizures are rare in horses, but can occur.

Richard Piercy FRCVS, professor of comparative neuromuscular disease at the Royal Veterinary College, talks to Catherine Welton

VERY few people have witnessed a horse having a seizure.

"We're more likely to observe a seizure in pet dogs than a horse that is out in a field for most of the time," says Richard Piercy, who has dealt with hundreds of cases of equine seizures over the years. "So while it's not a very common condition, I think it's probably more common than we realise."

A seizure is defined as abnormal electrical activity in the brain. Richard explains: "It's an electrical problem that spreads between excitable cells." Excitable cells – those capable of generating and conducting electrical impulses – are primarily nerve and muscle cells.

The period leading up to a seizure, or the "prodromal" phase, is often experienced by humans as mood changes,



The appearance of cuts with no clear indication of cause may possibly be a sign that a horse has suffered a seizure

light-headedness and other behavioural changes.

"In horses, there is often a very subtle change in behaviour that's usually missed by the owner or rider," says Richard.

The "ictal" phase – the seizure itself – can be focal (affecting one part of the brain) or generalised. This means the signs of a seizure can vary.

"Depending on which part of the brain is affected,

it results in different clinical signs, not all of which are obvious, which can make it difficult for owners and even vets to identify," Richard explains.

"If there's a seizure in one part of the motor cortex [the surface of the brain associated with controlling muscle contraction and movement], you'll see rhythmical muscle contractions in the part of