



## The Liphook Equine Hospital

### Equine Gastric Ulcer Syndrome (EGUS)

Horses, like humans, can suffer from ‘gastric ulcers’. These erosions in the wall of the stomach are caused literally by the stomach digesting itself. It was only with the advent of endoscopes long enough to reach into the stomach of a horse (3 meters!) that the real prevalence of this condition became apparent. Studies since have shown that up to 60% of sport horses and 90% of racehorses in training have gastric ulcers. Left untreated they can cause a variety of signs from poor performance to recurrent colic.

#### What Causes Equine Gastric ulcer syndrome?

The content of a horse’s stomach is pretty nasty. It is very acidic and contains enzymes which digest proteins. To protect itself against being burnt and digested the lining of the stomach produces a mucus lining. Saliva swallowed from the mouth also helps neutralise the acid. Ulcers occur when the acid stomach contents overwhelm these protective factors.

#### What are the risk factors for horses to develop EGUS?

##### 1) Diet:

Horses naturally eat little and often. This allows a steady production of digestive juices in their stomach and of saliva in their mouths, which neutralises the acidic stomach. Concentrates require less chewing than forage and therefore cause less neutralising saliva to be produced, increasing the acidity in the stomach.

##### 2) Exercise:

The horse’s stomach lining is divided into 2 distinct areas. The lower part is tougher, and has cells, which produce protective mucus. Because it is lower, it is normally submerged by the acidic food. The lining of the upper part of the stomach is more susceptible to ulceration. Normally it is not in contact with the acidic food. However when the horse is exercised this splashes the contents onto the upper lining, increasing the chance of ulceration. Horses in high levels of work are more likely to develop ulcers.

##### 3) Stress or illness

Both these will reduce the blood flow to the stomach, weakening its defence against the acid.

##### 4) Drug therapy

Non steroidal anti inflammatory drugs (NSAIDs) such as phenylbutazone (‘Bute’) can decrease production of prostaglandins, a hormone which helps protect the stomach against ulcers.

#### What signs might my horse show with gastric ulcers?

Foals are far more susceptible and show much worse signs. They may salivate profusely, grind their teeth and develop colic and diarrhoea.

In adult horses the signs are usually more subtle. Weight loss, poor performance, decreased appetite, dullness, recurrent colic and wind sucking are often seen, although sometimes they show no signs at all.

How can you diagnose EGUS?

Initially, your vet might be suspicious if your horse shows the signs above. However, examining the lining of the stomach with a gastroscop can only make a definitive diagnosis.

How do you treat EGUS?

There are several ways to treat EGUS.

1) Omeprazole (Gastrogard) is normally the drug of choice. It works by inhibiting the production of acid from the lining of the stomach, and is given for at least 2 - 4 weeks.

2) Feed low concentrate, high fibre diets (especially alfalfa).

3) Reduce intensity of training.

4) Reduce stress. Minimise travelling or box confinement.

5) Further drug treatment. There are several other drugs, which may be used to treat EGUS, according to its severity and response to initial treatment.

Ulcers normally take 2-4 weeks to heal, and normally the horse will be rescoped to check progress at this time



Gastric ulcers seen via a videoendoscope.