

Grass staggers

Pablo Sancho Ros



The seasonal topic of this month is Grass staggers, a metabolic disease caused by magnesium (Mg) deficiency. It is also called hypomagnesaemia.

Mg plays an important role in nerve and muscle function and functioning of the immune system. Although cows have significant stores of Mg in the bones, only a little of these stores are available to maintain levels in the blood. Therefore, the cow is dependent on the Mg supplied in the diet and from supplements to maintain blood levels. Blood and urine tests can confirm Mg deficiency.

The initial symptoms of Mg deficiency are nervousness, twitchiness, muscle tremors, staggering, ears pricked, nostrils flaring, eyes alert and head held high. Cows suffer loss of appetite and reduced milk production. Movement is stiff, like a cow is walking on stilts, and she will stagger when forced to move quickly. This progresses rapidly to the cow going down and suffering seizures and convulsive 'paddling'. Death results from a "tetany", where the muscles contract uncontrollably, including the heart.

Staggers is typically seen in unsupplemented grazing cows (beef or dairy) at the peak of lactation following spring turnout in wet weather, or in the autumn when there's a late flush of grass.

Grass staggers can be prevented, it is recommended that dry cows receive a diet containing 0.35 percent Mg, and lactating cows 0.28 percent Mg.

There are several sources of magnesium, and different methods of adding these into a cow's diet. Common methods include drenching, pasture dusting, as magnesium bolus, and through water (treat all water sources, or cattle might avoid the supplemented water and drink elsewhere). Each method has its own limitations and advantages, so it is up to each farm how they choose to supplement their magnesium.

Factors that increase Mg requirements of cows during the winter/spring period are:

- Diets naturally low in Mg and/or high in potassium (K)
 e.g. pastures (low Mg or high K), maize silage or fodder beet
 (low Mg), paddocks with high potash or effluent (high K).
- Cold wet weather in spring, depressing grass growth cow intakes.
- High cow demand for Mg over calving and early lactation, e.g. due to high milk production.

Call us as soon as you suspect Grass staggers. The treatment is Mg under the skin, plus some calcium given slowly into the jugular vein. Staggers is an emergency – the sooner we arrive the better the prognosis will be.

If you have any questions about this give us a call and we will be more than happy to help you.



Staggers is a true veterinary emergency. A bottle of magnesium is an essential part of treatment, but remember never to give magnesium directly into the vein – you may end up killing the patient!

Stepping up!

We're delighted to announce that Carolyn has accepted a position as Farm Clinical Director at Scarsdale, working alongside Sandy as he prepares for his retirement later this year (more about that in a later edition!), and that Fay has been appointed Senior Vet. Carolyn and Fay are both excited about their new roles and are looking forward to helping the farm department progress and continue to do its best for our clients and their animals, while upholding Scarsdale's core values of care, trust and professionalism.



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Parasite of the Month: Nematodirus



Dr. David CharlesCertHE(Biol.) BVSc MRCVS

Nematodirosis is an important disease that affects (and rapidly kills) young lambs at grass.

Caused by the parasitic worm Nematodirus battus, it can take hold and cause widespread death and disease very quickly, especially in certain weather conditions.

Worm development occurs within the egg, which can survive on pasture for up to two years, and hatching occurs when temperatures see a cold snap and then reach 10°C again. As a result, we often see a mass emergence in spring which can coincide with turnout of lambs (usually affecting those over 6 weeks, however thin/weak lambs that don't get enough milk can be affected earlier in life). Thankfully most lambs will have a level of immunity once they exceed 3-4 months.

SCOPS provide a Nematodirus forecast online: https://nadis.org.uk/parasite-forecast/

The best method of prevention is to avoid grazing lambs on pasture that was grazed by lambs the previous year (i.e. pasture rotation)

Nematodirus is currently treated well by a Class-1 (White) benzimidazole product, and flock health club members have access to discounted Endospec throughout the spring!

Diagnosis is through clinical signs (profuse watery scour with dull, depressed lambs), history of the pasture (if it's been grazed by lambs the year before they may have shed eggs that have overwintered), and through post mortem examination of dead lambs.



Faecal egg counts have limited use for nematodirus, if even ONE egg is seen then treatment is recommended as the clinical condition is caused by N.battus larvae and adults before they mature to lay eggs.

SCOPS identify the key questions to assess your risk as:

- 1. Are your lambs old enough to be at risk? (Usually 6 12 weeks to be eating enough grass, possibly younger if ewes lack milk)
- 2. Has there been a sudden cold snap followed by warm weather?
- 3. Have you got lambs under other stressors? (e.g. triplets, fostered or from old ewes)
- 4. Do you have groups where mixed infection with coccidiosis is highly likely? (e.g. mixed age groups) AND
- 5. Are you using pasture that was grazed by lambs last spring?

Case Study: Chronic bloat of unknown origin in beef youngstock



Sandy JamiesonBVM&S MRCVS

Many years ago, a wise old beef farmer bought an old veterinary textbook from an antiques shop...

The farmer fed a lot of bread waste to his herd and had a lot of larger (250kg plus) bullocks with severe bloat due to the plastic wrappers being eaten. These wrappers ended up balling up and preventing proper rumination. The current trocar and cannulas (red devils) are very good for short term relief of bloat but need constant supervision to prevent blocking and are prone to the plate part being chewed by other cattle. The farmer called us out to see a couple of sick calves which were in fact two large, very blown, bullocks. He proceeded to produce his book and request that we carry out the technique that he'd read about.

The book did indeed have some idiot proof pictures of a technique called "fenestration", from the French for 'window'.

The technique is very simple and involves some local anaesthetic, cutting a 5-6cm hole out of the skin over the site that you would trocarise, then bluntly pushing through the muscle layers down to the peritoneum.

Gently cutting through the peritoneum, the idea is to grab the bloated rumen. My advice is to wear goggles, as there is a limit as to how much rumen contents you want in your eyes. Two big stitches hold the rumen to the skin, then we cut properly into the rumen and stitch the rumen edges over the muscle onto the skin. This takes a bit of time as it involves a lot of single stitches.

Once completed there is now a semi-permanent "hole" or "window" into the rumen. Because the touching parts are the inside of the rumen wall, they won't heal together. The bluntly dissected muscle layers act as part sphincter so the hole semi-closes but opens to allow gas out.

After-care is minimal, although the area below the blow hole can be quite stained with rumen contents, and the animal should get to a useful size for slaughter.

It's an excellent salvage technique for larger beef animals where the cause of bloat isn't obvious.







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