Nematodirus in Lambs: Prevention is Better than Cure

The perennial problem of Nematodirus battus-caused profuse, watery, yellowy-green diarrhoea still leads to acute dehydration and on-farm deaths on many farms. As the onset of the disease can be very fast, farmers have to be vigilant and respond rapidly with appropriate anthelmintics.

As spring quickly approaches, farmers will be looking forward to getting ewes and their lambs out to pasture. However, it is important to remain vigilant as sudden changes in spring weather can lead to serious problems with Nematodirus battus.

Nematodirus is a very serious and nasty parasite in lambs. At worst it can cause lamb losses (up to 5%) and at best it will have a serious impact on growth rate and live weight gain. These all result in increased costs and stress, as well as decreased profits, for the farmer.

Due to previous exposure, adult sheep have acquired resistance. As lambs have never encountered Nematodirus battus previously, they have absolutely no protection from it.

When the weather suddenly changes from cold winter days and nights, to warmer spring weather, Nematodirus is at its most dangerous. This is due to a mass hatching of parasites which have over-wintered on the pasture. If this coincides with the time lambs begin to eat significant amounts of grass (6 - 12 weeks old) this can have devastating effects. The challenge will vary depending on the weather and region, with problems tending to become apparent earliest in the milder, south-east of the UK, and slightly later in Northern England and Scotland.

It is vital to know the parasite forecast for your region, which your vet will be able to discuss, and which can also be accessed online (www.nadis.org.uk) to allow you to formulate the best approach to preventing acute Nematodirus. However, due to the quick-striking nature of Nematodirus, it is vital that farmers have this issue at the top of their minds and are ready to take action.

Nematodirus is different to other parasites because the larvae develop inside the egg on the pasture. As soon as the mass hatching is triggered by the weather, they are active and ready to infect lambs. Rather than being passed from adult sheep to lambs within the flock, it is passed from the previous year’s lamb crop to this year’s via the pasture, making it particularly difficult to control.

Nematodirus Strikes Fast – Be Ready
Nematodirus is a very difficult disease to counteract as it strikes very suddenly, so it is important to prevent it and pre-empt when it is likely to be an issue.

The damage is caused by the large number of infective larvae...
ingested, so unfortunately we cannot wait for symptoms to appear as severe damage will already be inflicted, resulting in massive losses in terms of mortality and production. In surviving lambs it can add an extra 2-3 months to reach market condition.

**Signs of Nematodirus infection:**
- Sudden-onset profuse diarrhoea
- Faecal staining of tail and perineum
- Dull/depressed lambs
- Lambs which stop sucking
- Gaunt condition
- Dehydration
- Rapid loss of body condition
- Lambs congregating around water to rehydrate

Faecal worm egg counts are sadly not useful for acute Nematodirus infection as the disease is caused by adult infective larvae which are not yet producing eggs (which can take as long as 2-4 weeks once ingested). FWEC are absolutely vital for monitoring response to treatment following infection.

**High Risk Factors for Nematodirus battus:**
- Lambs grazing pasture that carried lambs the previous spring
- A sudden, late cold snap which is followed by a period of warm weather
- Lambs that are old enough to be eating significant amounts of grass (6-12 weeks old)
- Groups where there is also likely to be a challenge from Coccidiosis
- Lambs that are under other stresses, e.g. triplets, fostered, on young or older ewes

**Treatment**
Thankfully treatment with an appropriate white drench, including 2.5% albendazole, is highly effective, relatively inexpensive and safe in lambs. I recommend 2.5% drench, which contains 25mg/ml albendazole, as well as selenium (0.27mg/ml) and cobalt (0.624 mg/ml).

It is extremely important to dose for the correct weight of lamb to ensure we do not select for resistant worms. A FWEC is recommended 7-10 days after anthelmintic drenching to ensure that treatment was effective. It must be noted that severely affected lambs may require multiple treatments, which your vet will be able to advise you on. Usually, for lambs born from the second week of March onwards, treatments are given three weeks apart in May. In greater risk years, three anthelmintic treatments are given, extending the drenching period into June.

**Prevention**
Avoid grazing lambs on the same pasture in consecutive years, where possible.

Look at [www.nadis.org.uk](http://www.nadis.org.uk) for the NADIS Parasite Forecast, advising when the risk period is coming, and pay attention to the weather patterns in the spring period. Finally, many veterinary practices are issuing warnings to their clients when the risk period is predicted, so keep in contact with your local practice.

To avoid a Nematodirus outbreak, and the associated costs and stress, make sure you are ready to strike back.

For more advice, speak to your local animal health advisor or vet.

**Use Medicines Responsibly. Noah.co.uk**

Date editorial prepared: January 2015. Endospec 2.5% is a POM-VPS Medicine.

Bimeda supports the responsible use of anthelmintics.

Care should be taken to avoid the following practices because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- Too frequent and repeated use of anthelmintics from the same class, over an extended period of time.
- Under-dosing; this may be due to underestimation of body weight, mis-administration of the product, or lack of calibration of the dosing device (if any)

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