

FARM ANIMAL NEWSLETTER - JANUARY 2020

CRYPTOSPORIDIOSIS IN CALVES



Cryptosporidia is the major cause of calf scours in UK beef and dairy herds and has been identified in samples from more than 40% of diagnosed infectious diarrhoea cases.

THE PARASITE—*Cryptosporidium Parvum* is a protozoan parasite (not a bacteria, virus or worm but a similar type of parasite to coccidiosis or toxoplasma). Oocysts (eggs) are shed in the dung of the infected animal with millions of eggs per gram of faeces. As oocysts can survive in the environment for many weeks and as few as 10 oocysts are required to infect a calf there is a huge potential for spread of infection.

CLINICAL SIGNS—Symptoms vary enormously from milky diarrhoea to severe, watery scours and eventually death. Typically, the disease occurs in calves between 1 week and 4 weeks of age. As well as scours, calves will rapidly become dehydrated and then show ill thrift, loss of appetite and reduced growth rates.

DIAGNOSIS—We are able to test scour samples at the surgery for evidence of Cryptosporidia infection (we can also test for the other most common causes of calf scour – Rotavirus, Coronavirus and K99 Ecoli).

TREATMENT—The main thing to remember is that scouring calves are prone to dehydration so it is important to make sure that calves receive plenty of fluids by mouth - typically a 40kg week old calf will need at least 6 litres/day. Although conventional antibiotics have no effect against Cryptosporidia, Halocur or Parofor

administered daily for 7 days will stop Cryptosporidia from multiplying up inside the calf and allow the calf time to build up its immunity to the infection.

WHICH DISINFECTANTS ARE MOST EFFECTIVE AGAINST CRYPTO? - Unfortunately, once introduced the oocysts survive well in cool, moist conditions and are resistant to standard in house disinfection procedures. Only a few disinfectants will kill off Cryptosporidia oocysts. We stock Kenocox which at a 2-3% solution is licenced to kill 99% oocysts after 2 hours of contact.

CONTROL—The cause of scour in often multifactorial and there is no one measure to ensure total control of all scours. Good biosecurity, vaccination and nutritional policies will all help to minimise the incidence of scours on farm.

Some of the following quick control tips may help to reduce scours in your calves:

- Use disinfectant at the entrance to calf sheds.
- Vaccinate dams against Rotavirus, Coronavirus and K99 Ecoli (Rotavec Corona or Bovigen) to minimise the impact of these other scour causing pathogens.
- Make sure calves receive adequate good quality colostrum ASAP after birth (The five Q's of colostrum management Squeaky clean, Quickly, Quantity, Quality, Quantify).
- Do not mix young calves with older calves as older calves may still shed Cryptosporidium oocysts.
- Muck out, steam clean, disinfect and leave pens to dry as frequently as possible.
- Keep all calves warm and hydrated. This is particularly important if they are scouring.
- Quarantine sick calves ASAP after scouring starts and do not mix them back in with healthy calves for at least 1 week after scouring stops.
- Make sure you tend to your healthy calves before your sick calves so as not to transport pathogens back from the sick to uninfected calves.



For a comprehensive review of your calf housing, colostrum management, feeding, growth rates, vaccination and disease control we offer a complete **calf health monitoring package**. For more information contact the surgery.

CALF SCOUR VACCINE

Rotavec Corona and Bovigen are single dose vaccines administered by intramuscular injection to the cow between 3 weeks and 3 months prior to calving. This creates high levels of protective antibodies to Rotavirus, K99 Ecoli and Coronavirus in the colostrum and milk which is then passed on to their calves.

A single injection of **Rotavec Corona or Bovigen** generates at least **60 times** more antibodies than an antibody paste. The vaccine is particularly useful in suckler herds but is now increasingly being used in dairy herds as well.

Controlling Rotavirus, Coronavirus and K99Ecoli through vaccination can reduce the impact and severity of scours due to Cryptosporidia and should be considered as part of a Cryptosporidia control programme.

COPPER DEFICIENCY AND TOXICITY IN SHEEP



As lambing time approaches it is imperative that we know the copper status of our flock to prevent Swayback in lambs. The breed of sheep and the nature of feed can have a big influence on the likelihood of copper deficiency. Suffolks and Texels are very efficient at absorbing copper from the diet and are therefore less likely to become copper deficient than other breeds. Blood sampling 6-12 ewes will ascertain the copper status of the flock and whether supplementation is required.

If supplementation is needed, there are a few options available:

Copper Drench— 'Newhouse' or 'Swayback' drench. The amount of copper which can be given in one dose is limited because of the potential toxicity. These drenches can

therefore only give a short term boost to the liver copper levels. Ewes may need to be drenched twice; firstly in mid pregnancy and again one month later. It is not advisable to treat for liver fluke at the same time as giving a copper drench.

Copper Capsules—**Copinox**. These are gelatine capsules containing copper oxide needles. They are administered orally to the ewes either before tupping or during the first half of pregnancy. The copper needles attach to the wall of the abomasum and dissolve slowly over 3-4 weeks allowing efficient uptake and storage of copper in the liver with minimal risk of toxicity. Liver copper levels can remain increased for at least 6 months.

Copper Injections—**Veticop**. Copper injections give a rapid, short term (2-4 month) increase in copper levels. The injection is administered as a single 2ml subcutaneous injection during mid-pregnancy.

Please talk to one of the farm vets if you would like to discuss blood testing ewes for copper status or the various treatment options available.

On a cautionary note, Scottish Agricultural Colleges (SAC) have reported an increase in the number of sheep diagnosed with copper poisoning in the last year. Copper poisoning can be acute, caused by an overdose of copper containing products, or chronic in nature. Chronic copper poisoning is the more common presentation and is due to ingestion of excess copper in the diet over a long period of time. Sources of copper may include concentrates, mineral licks, supplements and in some cases background levels of copper in forage. Mineral licks formulated for cattle often contain higher levels of copper which can be harmful to sheep if they have access to them. At Dalehead we have seen cases where sheep have been treated with copper routinely over successive years, the copper has accumulated in the liver and subsequent feeding sheep concentrates has caused toxicity problems. Poisoning is more common in susceptible white faced sheep breeds, the commonest recorded breed being Texels.

Copper is stored in the liver and when the storage capacity is exceeded copper can be released into the blood stream where it causes damage to the red blood cells (haemolysis). It is worth noting that a haemolytic crisis can be precipitated by stress such as travelling and sales and current exposure to copper does not have to feature.

Presenting signs range from sudden death to lethargy and recumbency followed by death. The mucous membranes, especially those around the eye, will often be jaundiced. Treatment of affected animals is unrewarding and efforts should be focused on reducing exposure.



LAMENESS IN HOUSED SHEEP



Lameness is most commonly due to footrot, CODD or scald, all of which are infections that can spread from sheep to sheep very easily when sheep are housed. Footrot is caused by a bacteria, *Dichelobacter Nodosus* which does not survive off the sheep for more than 7-10 days. The main route of transmission is by contaminated pasture or bedding which then spreads the infection to other sheep. Contagious Ovine Digital Dermatitis (CODD) is associated with Treponeme bacteria which enter flocks on infected sheep but many CODD lesions also contain footrot bacteria. Sheep with CODD will show severe lameness typically affecting one claw of one foot with reluctance to bear weight. Initially a small sore will

appear on the coronary band, causing inflammation which travels down into the hoof causing the whole hoof capsule to detach. The damage caused by CODD can be so severe that horn regrowth is permanently damaged. In the early stages not all affected sheep will be lame so careful examination prior to new purchased animals for signs of CODD is essential.



Treatment

The current recommended treatment for footrot is an injection of long acting oxytetracycline into the muscle at a dose rate of 10 mg/kg, together with an antibiotic spray. It is also advised that a NSAID is administered alongside the antibiotic treatment as this will reduce pain and inflammation in the affected limb. Most sheep recover from lameness within a few days, a few may take up to 10 days and lesions heal over a similar period. It is advised affected sheep are isolated with other sheep undergoing similar treatment. Mark or record the treated limb and ensure every treatment for lameness is recorded for each individual animal. Paring the hoof in cases of footrot exposes or damages the sensitive growing tissue (corium) causing pain, delaying healing and sometimes resulting in toe granulomas. Exposing your hoof trimmers to the bacteria also causes the spread of footrot and is not recommended. Very loose horn should be carefully trimmed once the footrot

lesion has resolved to ensure that the painful corium is not exposed. Disinfecting hoof trimmers post trimming with surgical spirit or hot soapy water will reduce the risk of spreading the footrot. Footbathing is not an effective way to treat footrot and high concentrations of formalin will cause pain and increase granuloma formation.

Prevention and Control

Lameness control strategies in sheep are based on the **Five Point Plan** which has been demonstrated on UK farms to be highly effective in reducing the incidence of lameness to consistent, very low levels. The elements work together to control lameness by:

- Increasing natural genetic resilience
- Decreasing the disease challenge
- Increasing immunity



Treat

CULL: There is a genetic element to susceptibility to scald and footrot. Aggressive culling to remove sheep that have repeated lameness, are constantly infected or have severely misshapen feet increases the resilience of the flock.

QUARANTINE: Prevent purchased or returning sheep from bringing new strains of footrot or CODD onto the farm. A quarantine period of 28 days is recommended before mixing with the flock but adhere to the advice in your flock health plan.

TREAT: Prompt and effective treatment and the isolation of affected animals reduces the spread of bacteria. Treat according to your flock health plan and seek veterinary advice if the diagnosis is uncertain.

AVOID INFECTION: Correct underfoot conditions minimise infection risk during gathering, handling and housing. Move feeders and drinkers to clean areas regularly. Rotate grazing to prevent bacteria building up at pasture. Improve gateways and tracks. Use footbathing at times of high risk as a prevention measure e.g. prior to housing and after gathering to reduce bacteria levels on the feet.

VACCINATE: There is a vaccine available (Footvax) which aids in developing immunity against scald and footrot and will help in control of CODD.

For more information, please contact the surgery.

FLUKE UPDATE

The regular blood sampling of lambs to identify the season's emergence of fluke is ongoing. We sampled 3 flocks at the beginning of December. Only 1/6 of the lambs in one of the flocks was positive, the other two flocks testing negative.

This shows there is only a slow emergence of fluke and these farms are still at low risk of disease. We are continuing the sampling in the New Year, although we are having to adapt our testing as the lambs are not grazing the same areas as the ewes and will therefore not be representative of the breeding flock. We will keep you updated.

As always, phone and speak to one of the farm vets or SQP's to discuss your individual farm situation.

CALF DISBUDDING

It is best to disbud calves at between one and six weeks of age. At this age the hornbuds are small, easily felt and not yet attached to the skull and calves are usually feeding well and have passed the greatest risk period for scours. Stress is minimal compared to an older calf which would have to be dehorned.

Disbudding with a hot iron is done using a local anaesthetic block and an injection of pain relief. There are many benefits to using pain relief, the main one being to minimise discomfort and stress which aids a faster recovery and reduced growth check.

Anna, our Farm Vet Tech, is able to disbud calves for just £5 plus VAT per calf including drugs. If you are short of time and assistance is needed for handling, an extra pair of hands can be brought along at a cost of £7 plus VAT per calf. See the enclosed leaflet for a list of other farm vet tech services available to help save you time and maximise productivity.

PRACTICAL LAMBING COURSE - Tuesday 28th January 2020 7PM at Dalehead Veterinary Group, Settle

The Practical Lambing Course continues to be very popular and we shall be repeating the meeting which is aimed at less experienced shepherds/shepherdesses. Smallholders, college students and upcoming farmers keen to expand their knowledge will benefit from the course. Topics covered will include demonstration of lambing techniques using our lambing simulator plus care of the newborn lamb, stomach tubing and colostrum management. We have received fantastic feedback from delegates attending in the past and this course is limited to 15 people so book early to avoid disappointment! There is a charge of £25.00 including VAT to cover costs and light refreshments will be provided. Call now to book your place on 01729 823538.



PRODUCT NEWS—CEPOREX INJECTION

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C. C. C.	Ceporex [™]
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Since **Naxcel** and **Cevaxel** (3rd and 4th generation cephalosporins) became classed as being critically important antibiotics there have been no injectable antibiotics available with a nil milk withhold. **Ceporex** is a related product (2nd generation cephalosporin) which has recently been re-launched with a nil milk withhold. It is <u>not</u> classified as a critically important antibiotic. The product is suitable for treating cows with foul in the foot, metritis or respiratory infections. To find out more about the product please speak to one of the farm vets.

SYNULOX LC PRODUCT BATCH RECALL

We have been advised by Zoetis (Manufacturers of Synulox LC) of a recall of any unused Synuloc LC tubes with the following batch numbers (part or whole boxes):

81950600	Expiry: 30.04.2020
81958301	Expiry: 30.04.2020
81962601	Expiry: 31.05.2020
81966700	Expiry: 30.08.2020

Dalehead

January

2020

If returned to us by 20th January we will be able to either replace the product or refund the cost of the product.

www.daleheadvetgroup.co.uk



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