Tysul Vets Farm Newsletter October 2015

Strepococcus Uberis Mastitis Infection Part 2

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Diagnosis, control and treatment of strep uberis

Diagnosis

Typical presentation of infection is raised bulk milk somatic cell counts, a high incidence of recurring cases and cases with poor response to standard treatment.

As with most types of mastitis, the gold standard is to run bacteriology on a milk sample. It is a good idea to collect and freeze samples from all clinical case. If response to treatment is poor or if there is a second clinical case in that animal in the same lactation then the sample should be run. In a situation where bulk milk cell counts are rising but the number of clinical cases is not concurrently increasing then it is advisable to carry out individual cell counts on cows or perform cow side California Milk Testing. This will allow you to identify high cell count cows and target those requiring bacteriology.

Control

Control of *strep uberis* is complicated, because of the way it can manifest both as an environmental and a contagious pathogen and control measures will depend very much on the strains present on your farm. The best way to look at methods of control is to consider the risk factors involved.

Risk factors and control measures

1. **Humid and damp conditions, poor ventilation**
   Create inlets and outlets in the roofs of cattle housing.
   Improve draining – ensures sufficient slopes in cubicles and straw yard housing.
2. **Dirty straw yards and cubicle sheds.**
   Provide clean and fresh straw bedding. Muck out deep beds regularly. Scrape cubes and passageways as often as possible.
3. **Poached areas around troughs and gateways**
   Provide hard standing around these areas.
   Use portable feed troughs if possible and position in well draining areas.
   Where possible, if using electric fencing move paddock entrance and exits regularly.
   Maintain cow tracks
4. **Overstocking**
   Optimal stocking density = 600kg cow requires 6.8^2 during lactation.
   Ideally there should be 5% more cubicles than the number of cows to reduce standing and lying in passageways.
5. **Teat closure post milking**
   Cows should be shut away from cubicles on a clean hard standing area for 30minutes post milking to allow teat ends to close.
6. **Dirty calving paddocks**
   Ensures dry cow paddocks are rotated, fence off areas of congregation. E.g. Around trees
7. **Teat contamination**
   Pre milking teat cleaning and disinfection, maintain a good parlour routine.
8. **Ineffective dry period cure rates**
   Sample high somatic cell count cows prior to drying off so that dry cow therapy can be targeted correctly at trying to clear the infection.
9. **Carrier cows – cows persistently infected and shedding *strep uberis***
   Early identification by sampling, treatment and culling of repeat or chronic cases.
10. **Cow to cow spread**
    Maintain consistent and strict hygiene measures in parlour – individual wipes, wearing gloves etc.
    Milk high cell count and infected cows last – consider creating a high cell count group if numbers are high and practicalities allow.
    Back flush/ dip clusters in peracetic acid after high cell cows.
11. **Purchasing carrier/infected cows**
    Obtain cell count information prior to purchase or ideally maintain a closed herd.

Treatment

Treatment of *strep uberis* in the lactating cow is not straightforward. True clearance can be very difficult and often treatment is aimed at reducing the bacteriological load and reducing the levels of shedding in individual cows so that spread is minimised. The best chance to achieve a true cure is at drying off and this is sometimes done both with intramammary tubes and with systemic antibiotics. If we find, through sampling that you have a problem in the herd then with bacteriology results we can help formulate a plan for both lactating and dry cows to try and reduce the levels of mastitis in the herd.

Summary of NADIS Parasite forecast October

Liver fluke

- This winter is likely to be high risk for liver fluke.
- Signs of liver fluke:
    - Sheep with acute liver fluke infestation can be found dead without previous illness.
    - Post mortem, examination is essential in diagnosing acute fluke.
    - Less severe clinical signs include reduced grazing, weight loss, anaemia and lethargy.
- **Action:**
    - Triclabendazole is the only flukacide effective against very immature fluke.
    - Evasion strategies should be taken when possible by avoiding wet, potentially contaminated areas.
    - When treatment is required, sheep should be moved from the contaminated pastures.
    - An antigen ELISA test can be used to detect resistance to the flukacide and this should be carried out if resistance is suspected.
    - Later fluke treatments should be carried out using flukacides other than triclabendazole as the risk moves from acute to chronic disease.
    - Flocks with no previous evidence of fluke disease must maintain strict biosecurity measures with respect to incoming sheep and cattle.

Parasitic Gastroenteritis (PGE)

- Clinical PGE is likely to remain a problem as larval challenge remains high, especially with current low lamb prices and more lambs being kept on and grazing increasingly overstock pastures.
- Use of group 4 and 5 anthelmintics at this time of year has to be considered to prolong the efficacy of older groups. These products should only be used after discussion with your vet.

Pre tupping treatment

- Anthelmintics treatment of breeding females pre tupping is rarely necessary and may select for anthelmintic resistant strains.
- Generally, treatment should be aimed at leaner ewes, yearlings and those with dirty backend.
- Don't forget the rams - a faecal egg count pre tupping will determine whether a treatment is needed.

Cattle nematodes

- Growing cattle housed after their first or second season of grading should be treated with a group 1 or 3 anthelmintic at housing. Pour on preparations have the added advantage of being effective against both sucking and chewing lice.
- Combined closantel and ivermectin products should not be given at housing as closantel is not effective against the very immature fluke. If cattle are at risk of fluke then they should be dosed 6 weeks after housing.

Practice News

It was with great sadness to hear of the death of Veterinary Surgeon and former partner at Tysul Vets, **James Davies, BVMS, MRCVS** last weekend.

Over 50 years ago James joined the practice as a young vet after qualifying in Edinburgh. He was a farm vet through and through and continued his interest in cattle and sheep maintaining a small flock of sheep after his retirement 20 years ago. James loved both playing golf and watching the rugby. For many of us it will be his great story-telling that we will miss hearing the most. He will be sorely missed. Our condolences and thoughts to his family.

James pictured below at his retirement dinner, with wife Tegwen and fellow partner Roger Lewis.

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