Tysul Vets Newsletter January 2015

Blwyddyn Newydd Dda i chi gyd
Happy New Year to you all

Responsible use of antibiotics in food producing animals (By Annwen Richards, BVSc, MRCVS)

As you may have seen in the farming press recently, there is growing concern about anti-microbial resistance in food producing animals.

Resistance to an antibiotic will increase in the following situations:

- Where antibiotics are over-used
- When under dosing animals and inaccurate weight estimation of an animal
- When a "one off injection" is given instead of complete course
- When antibiotics are used for other problems e.g. nutritional or viral problems

"Use the right drug, at the right dose, at the right time for the right duration"

There are certain antibiotics that should be reserved for third-line treatment or following the results of culture and sensitivity (for example from milk or faeces samples). The major group of antibiotics we are talking about are the **fluoroquinolones (FQ's)** that include:

- **Marbofloxacin**
- **Enrofloxacin**
- **Danrofloxacin**

This group of antibiotics kill **gram-negative bacteria** e.g. Salmonella, E.coli and Pasteurella. These may be useful in the treatment of such diseases but we must remember that the bacteria in the gut also become exposed to these antibiotics. Some alternative first (1) or second (2) line antibiotics include:

- **Trimethoprim/Sulfadiazone (1)**
- **Penicillin/Streptomycin (1)**
- **Oxytetracycline (1)**
- **Tylosin (1)**
- **Amoxicillin – Clavulanate (2)**

In the case of an infection caused by gram-positive bacteria e.g. Staphylococcus, Streptococcus, Clostridia and Listeria to name a few, other antibiotics instead of FQ's would be more appropriate. Therefore, if possible, getting a diagnosis and sampling is important to know which bacteria you are dealing with.

In some situations, e.g. E.coli mastitis, symptomatic treatment (nursing, anti-inflammatories and pain relief, oral or IV fluids, regular stripping, intramammary tubes) are just as important, if not more important, than systemic antibiotics.

We all have a responsibility to reduce our use of antibiotics otherwise in the future we will have more cases of MRSA type bacteria that we will be unable to treat in humans and animals. Equally if we use second line antibiotics first, where another antibiotic may have been appropriate, then one day our second line antibiotic will no longer work.

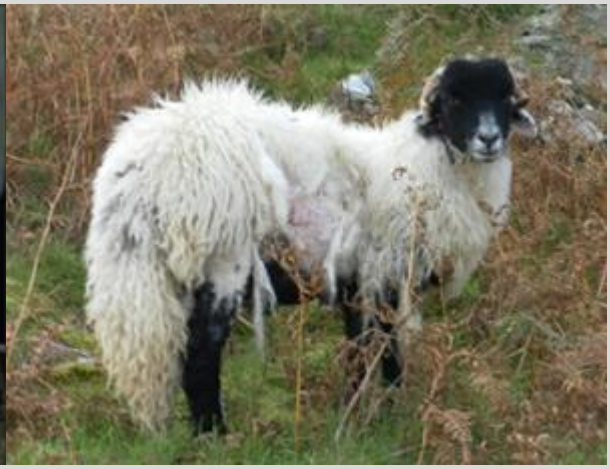
Did you know?

When carrying out culture and sensitivity on milk and faeces there are increasing numbers of samples that show resistance to multiple antibiotics!

Remember: Prevention is better than cure. Improving management and hygiene on farms should reduce the transmission of infective organisms from cow to cow and cow to calf. Some basic examples include:

- Not feeding milk from a cow with mastitis or milk from high cell count cows to calves
- Using a disinfectant footbath on entry to the calf housing
- Isolating sick animals in an isolation pen that can be thoroughly cleaned and disinfected after use.
- Improving bio-security measures
- Using effective vaccination programmes

Have you got Scabby Sheep? (by Sara Roche, BVMS, MRCVS)

Do you know which of these sheep has sheep scab?

Not sure? Only guessing?

Of course you are. It is impossible for you to be certain that either sheep has sheep scab without a diagnosis. Yet every year thousands of sheep are treated on the basis that people think they know. If you get it wrong it will waste your time and money, risk the health of the sheep and result in unnecessary use of products, increasing the risk of resistance in the future.

It could be a skin mite? Sarcoptic or Psoroptic

Sarcoptic Mange.

Infection caused by direct contact with infected sheep or environmental fomites.

Clinical Signs- Intense pruritic condition and causes dermatitis due to the burrowing activity of the female mite in the superficial skin and they cause self-trauma and may get alopecia and thickening of the skin. It usually starts on the head, face and neck.

Diagnosis-Skin scrape or skin biopsy can be carried out by your vet.

Treatment – Injectable formulations of Ivermectin, doramectin or moxidectin. Ivomec classic injection for cattle and sheep can be used.

Doramectin-(Dectomax 10mg/ml) solution used for cattle and sheep. Treat all in contacts.

Psoroptic Mange (Sheep scab)

Non burrowing mite can survive off host 3 weeks.

What is sheep scab?

Sheep scab Psoroptes ovis is a major source of economic loss in affected flocks and is a serious threat to sheep welfare. It's a reportable disease. Infestations can be very debilitating with clinical signs intense pruritus, biting and significant loss of condition, secondary infections, hypothermia and eventually deaths.

Sheep scab is actually an acute or chronic form of allergic dermatitis caused by the faeces of the Sheep scab mite is Psoroptes ovis. The mite is just about visible to the naked eye and can only remain viable off the host (sheep) for 15-17 days.
Diagnosis- Skin scrapes by your vet
Treatment – Injectable formulations of Ivermectin (Ivomec classic injection) and Moxidectin (Cydectin 1%). Give 2 injections 7 or 10 days intervals and keep animals isolated 10 days post 2nd injection.
Moxidectin (Cydectin 2%) is a one off long acting injection given subcutaneously at the base of the ear.
Subcutaneous injection into the base of the ear.
Doramectin 300ug/kg -Dectomax 10mg/ml solution used for cattle and sheep. After treatment contact between infected treated and untreated uninfected flocks must be avoided for 14 days.
Dipping can be effective if done 2 weeks after shearing and must be repeated after 14 days.
A license has to be obtained from ministry as Organophosphates are restricted drugs.

(Scabby Sheep continued)

Other mites to consider?

Ear mites Pscorptes Cuniculi
Clinical signs: It affects the head and neck and can cause severe irritation.
Diagnosis- Ear wax sample
Treatment – Any of acarides approved for skin mites eg Ivermectin, doramectin or moxidectin.

Demodectic Mange Demodex ovis
Clinical signs-Nodules (folliculitis or furnucolosis of face and neck and shoulder).
Diagnosis- Skin scrape or histology on a skin biopsy.
Treatment- Dipping but this requires a license.

Chorioptes Bovis
Transmission by direct contact and housing
Clinical Signs- Papules, crusts are seen on the feet and legs.
Diagnosis- Skin Scrape
Treatment- Ivermectin, doramectin or moxidectin
Ectoparasites
Lice (Bovicola Ovis - Chewing/Biting Lice
Transmission by direct contact and housing
Clinical Signs- Often confused with Sheep Scab, Scratching and Rubbing of fleece, not always a scab.
Diagnosis- Skin Scrape
Treatment- Cypermethrin pour on (eg Crovect - 8 day meat withdrawal)
Withdrawal periods for drugs in meat

- Ivormectin,Ivomec classic injection Meat and offal 37 days
- Moxidectin, Cydectin 1% Meat and offal 70 days.
- Moxidectin, Cydectin 2%, Meat and offal 104 days.
- Doramectin, Dectomax 10mg/ml meat and offal 63 days

(Note none of these products should be used in dairy ewes producing milk for human consumption

Tysul Vets
01559 363318
Mon-Fri 8.30-5.00, Sat 9.00-12.00
24 hour emergency service

Farm Dog Neutering Scheme
Are you aware that the Dog's Trust offer a **free** neutering scheme for Farm Dogs. On provision of your 'holding number' you can have your bitch or dog neutered for free.
Microchipping of Dogs
We are currently running a **free** scheme for dogs with support from The Dog's Trust. The scheme will run until the end of February 2015. Chipping of ALL dogs will be compulsory in March 2015.
Telephone 01559 363318 to book an appointment - remember if you are booking your dog in for neutering we can chip at the same time.

Herd Health Plans - Red Tractor Assurance Scheme changes and Mobility Scoring
In October 2013 the Red Tractor Assurance Scheme reviewed their standards for the dairy sector. There is now an additional Part C in the Herd Health Plan. In part C the herd's vet will need to review the health and performance data and relevant records relating to mastitis, lameness, culling and mortality data as well as viewing a random selection of cows in milk and other stock where appropriate. This is NOT a 'tick box' exercise. The more records and accurate information you can provide in this section the more you will get out of the review. Please plan in advance

- Book an appointment to see a Vet to review your plan
- If a Vet hasn't been on farm recently, you may need a visit.
- Bring your part of the plan and any other documentation for your vet to look at in **advance of your meeting**
- Be prepared to spend an hour or two at the surgery with your vet to complete Section C of your plan.
- Allow the Vet time to fully write up& sign your plan.

Remember you will also need to carry out Mobility Scoring every 6 months on at least a sample of the herd. Mobility scoring on a regular basis will enable you to:

- promptly identify and treat lameness
- monitor your incidence of lameness
- identify particular issues with time of year, indoor vs outdoor problems
- evaluate the effectiveness of treatments and management changes
- allow you to benchmark in comparison to your herds previous recordings and in comparison to other herds

If you require further information regarding the RTA scheme changes or mobility scoring please contact the surgery.
01559 363318

Stress in dairy cattle (By Liz Harries, BVSc, MRCVS)

Just like us, the adverse effects of stress can lead to undesirable metabolic changes in the cow and have a knock on effect on health and productivity. At a time where yield is paramount to a cow earning her keep it is vital that we keep negative effects to a minimum in order to get the best out of our cows.

The Science behind Stress

Stress causes the release of two main hormones, which form part of the cow's natural 'fight or flight' mechanism, evolved over time as a response to dangerous situations. **Cortisol** and **Adrenaline** help prepare the cow for escape from a danger by increasing heart rate and breathing. These adaptions have evolved over many years, previously we would think about the cow being the prey and running from a predator Stresses inflicted upon the modern dairy cow are very different but equally catastrophic if allowed to escalate.

- **Acute stress**
  - The best example of this is stress put on the cow at milking time which becomes apparent in poor milk let down, increased residual milk in the udder at the end of milking and therefore a reduced milk yield.

- **Chronic Stress**
  - Long term stresses will have an ongoing effect on the cows' metabolic system. The best example of this is poor environmental conditions leading to release of the hormone cortisol. Cortisol acts by suppressing the immune system of the cow and leaving her at a higher risk of picking up infections such as subclinical or clinical mastitis.

How to Reduce Stress

Listed below are a few ideas on how to reduce stresses in your herd:

- **Improve Handling facilities**
  - Ensure your handling race has no sharp corners and dead ends. Cattle move easier when there you can maintain a steady flow of animals in the race and they are not prevented from seeing the cow in front.
  - A strong crush with a yolk adjusted to the correct size for the animal allows good restraint and reduces stress on the animal whilst you are treating/carrying out routine tasks if she is not constantly pushing backwards and forwards trying to escape. Never underestimate the importance of a good crush! Vets appreciate them particularly whilst TB testing as it makes our job much safer!
  - Crushes adapted to allow you to trim feet should have adequate support for the cow in the form of a belly bar and foot blocks. The time taken to carry out these tasks will be greatly reduced and be much safer if the cow can comfortably stand still while you work.
  - The floor surface in your handling area is also important. Old, worn concrete subjected to a scraper bucket will have no grip and a cows stress levels will increase significantly if she is struggling to grip the ground whilst moving around. A quick and cheap way to reduce the risk of slipping is to grind groves in the concrete, especially around the entrances to races etc where cows are likely to be rushing and pushing each other.
  - Monitor your backing gate speed. Although now common place in many collecting yards it is important that they are used correctly – they will not only cause undue stress but are likely to increase lameness too.

- **Minimise rough handling/loud noises**.
  - Keep shouting and slapping to a minimum. Cows that are scared are much less likely to be compliant! Research has shown that gentler handling of youngstock reduces their fear to people later in life.
  - Quiet handling at milking time leads to reduced milk let down time and shorter milking times which increases productivity and efficiency

Keep a regular routine.

- Cows are a stickler for a routine, most farmers could tell you straight away who will be in the first batch to milk and who in the last! Changes to a routine will have a large knock on effect on stress and productivity. Regular milking staff will reduce stress in the parlour. Post milking most cows will go and drink and then eat before going to lie down so making sure food is always pushed up and the passageways are scraped ready for cows coming out the parlour allow the cow to go about her normal routine without any bother and undue stress.

- **Reduce the effects of a bully cow**
  - Every group will have a dominant cow and making sure that the more submissive animals can still get to cubicles, feed barriers etc. is important. This is implemented by making sure stocking densities in sheds are correct, there is adequate feed space and enough cubicles for number and type of animals.
  - Take care when mixing groups. If you have a transition group between calving and the main herd then give your high risk cows e.g. heifers longer to recover before moving groups again.

- **Environment Stresses.**
  - Poor ventilation and heat stress along with poor stocking density have the biggest effects on stress levels. The knock effects of environmental stresses are mention earlier, making small changes like improving ventilation or creating a loafing area can significantly reduce stress.

- **Disease Stresses.**
  - The connection between disease and stress is an ongoing cycle. Disease leads to stress which in turn predisposes to more disease. Mastitis, Lameness, Early Lactation metabolic derangements and the biggest factors to consider. Taking steps to reduce these will not only reduce stress but will give you healthier cows who produce you more milk!

*******Booking in TB tests******

We receive notification of TB tests that are due electronically from APHA (formerly AHVLA formerly DEFRA!) and you should receive notification by letter at or around the same time. We will attempt to contact you to book a date for your test but ultimately **it is the responsibility of the farmer** to ensure that the test is booked in before it becomes overdue.

The Welsh government has imposed a **'zero tolerance' approach to overdue testing** and farmers will be penalised with a reduction of their single farm payment. Tests **must** be completed with **all eligible animals being injected and read before or on the last day of the testing window.**

We try to find time slots to suit you and it is of course easier to do the more notice we have. Please give us a call and speak to Elin or Sheila on reception as soon as you have your notification so that we can ensure you get a suitable time and date for your test. We thank you in advance for your co-operation.

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Lambing List (By Liz Harries, BVSc, MRCVS)
Lambing can be stressful time for both sheep and farmer and being prepared is vital to ensure you have all the bits and pieces required. Below is a list of essential items that it is worth having together in a tray or box so that they are easily to hand.

Equipment Box:

- Obstetrical Gel/Lube
- Long Sleeved Gloves,
- Iodine Spray
- Lambing Snare
- Selection of needles and syringes
- Heat Lamp with spare bulb
- Marker Spray
- Terramycin spray
- Lamb Stomach Tube
- Bottles with nipple teats and larger teats.
- Thermometer
- Rubber rings and elastrator
- Halter
- Disinfectant
- Hibiscrub
- Box For Warming/Holding Lambs
- Lamb Rain Covers

Other Important Items to Have:

- Supply of frozen ewes colostrum/ commercial colostrum powder
- Powdered Milk Replacer
- Milton Sterilising Tablets

Medicines Box (to be used after discussion/examination by vet):

- Long Acting Antibiotics
- Non Steroidal Anti-Inflammatories
- Scourhalt
- Calcium
- Glucose
- Electrolytes e.g. Effydryl tablets, lectade.
- Twin Lamb Drench/Propelyne Glycol

News: From April 2015, APHA will manage TB testing through Delivery Partners who have successfully tendered for the work. These Delivery Partners will be responsible for testing in one or more geographical regions of England and Wales. A tendering exercise is under way and announcement of the successful Delivery Partners is planned for early 2015.

We will update you in our next newsletter as to who has been appointed as the Delivery Partner for this area and how this may affect you.

The aim is for the new Delivery Partners to take over from April 1st 2015.