



Smithton Veterinary Service

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Anti-inflammatories/Pain Killers

For many years we have been using anti-inflammatories as part of our treatment of downer cows, lame cows etc. The decision to use these has, and always will be at the vets' discretion. However, with the increasing focus on animal welfare and the recent development of new and safer products that are registered for use in cattle we are now happy to consider prescribing some of these drugs.

For specific cases, and after consultation with a vet, we may decide to dispense pain killers over-the-counter. It is important to reiterate that in many situations the most appropriate approach will be for a vet to examine and assess these cows in the first instance. We see many down cows with broken legs, dislocated hips, knee ligament and pelvic/back injuries for which the most appropriate treatment is prompt euthanasia. Pain killers in these cases are not indicated from a welfare perspective and are a waste of your money. In the case of lame cows and pain killers it is always necessary that appropriate examination and trimming occur first, with antibiotics and application of a wooden block also often needed.

If you have cases that you think may benefit from pain killers you will need to speak to a vet first. These drugs will not be prescribed in a routine manner for everyone to have on hand just in case.

READ & WIN

Do you read our newsletter?

This month there are 4 questions at the end. The answers are in the newsletter articles.

Please drop in or fax your answers to the clinic.

The first correct entry drawn will win an Oringi milking apron.

Entries close 20/10/07

***Congratulations to Doug
Nicholls
the winner of last month's quiz.***

Mastitis Matters

Contrary to wishful thinking, not all cases of mastitis will cure. The most optimistic cure rates quoted are usually no more than 90%. This means, in general at least 1 in 10 cases may not cure. In reality cure rates may even be substantially lower with rates of 60-80% often being quoted. This applies to using intra-mammaries or injectables or both.

Cure rates will depend on the bacteria involved, when the mastitis was detected, when treatment started, age of cow, previous mastitis history, previous cell count and which quarter is infected. Unless a sample with culture results is available showing a resistance to a particular antibiotic, then changing the type of tube or using an injectable may not necessarily improve the cure rate in any one cow.

Cure rates decrease with each subsequent episode such that rates as low as 12% are quoted for cows on their 3rd episode of a Staph aureus mastitis regardless of the product used. The likelihood of cure also decreases with those cases that appear later in lactation.

Mastitis cases in younger cows and where a Strep bacteria is involved are more likely to cure.

It is important to use the full specified course to decrease the likelihood of recurrence and minimize the possibility of resistance developing.

Options available if no response to treatment is seen, include repeat treatment (what impact on WHP??), change the product, dry off the quarter (cannot dry cow treat) or dry off the cow or cull. It may be a better option in those cases detected late in lactation to dry off early and use dry cow therapy where cure rates are higher.

There are no miracle products or silver bullets for mastitis treatment. Farmers need to be aware of the circumstances of each case and not have unreasonable expectations of cure rates. By detecting and treating early, following recommended doses and using culture results when necessary, cure rates can be maximised. But remember, some cows will never cure.

Heat Detection (from InCalf)

After a difficult Autumn and Winter it will be important to maximise the number of cows detected and submitted for mating. Some low cost ways to make the most of this season's heat detection program are:

- Start heat detection before mating start to give you some indication of the number of cows cycling and to identify, check and treat any non-cyclers as appropriate.
- Brush up on signs of heat.

Communicate – make sure everyone involved in heat detection knows the signs and understands your recording system.

Signs of heat:

A cow is most likely on heat if:

- She is standing to be mounted by other cows.
- Tail paint is removed.
- Heat mount detector is triggered.

A cow **may** be on heat if:

- She attempts to mount other cows.
- She is restless or bellowing.
- Tail paint is rubbed but not removed.
- She has poor milk letdown.
- You see mucus around the vulva.
- You see mud marks on the flanks, or
- The heat mount detector is lost.

A cow with at least 2 of these signs may be on heat but only showing weak signs. If you are not sure whether to inseminate or not consider the following:

- Record a “?” in the AI record when you inseminate a cow that is possibly on heat but you are not sure.
- Look up any previous AI and heat records for the cow and,
- AI if the cow has not been inseminated since calving and shows reasonable signs of heat.
- AI if the cow's previous insemination was more than 20 days ago.
- If the previous insemination was less than 20 days ago, inseminate if the previous heat was weak (recorded “?”). Otherwise look for more signs of heat.

If you decide to inseminate a doubtful cow:

- Don't pass the gun right into the uterus if you have difficulty passing it through the cervix.
- Consider using less expensive semen.

Review your heat detection practices if:

- More than 10% of inseminations are cows with weak signs or,
- Many insemination intervals are less than 18 days.

Piliguard® Vaccine for Pink Eye

Piliguard® vaccine, the new registered vaccine for pink eye, will be available from October. Those of you who are interested in using it should contact us so we can negotiate a price with our wholesaler.

Please let us know of your requirements ASAP as already it appears the vaccine may be in short supply. The vaccine needs to be administered 3-6 weeks before the predicted challenge period.

VIS VAGING – ARE YOU WASTING AI STRAWS?

Maintaining fertility in your dairy herd is a difficult task. It is important that you intervene where you can to help maximise the likelihood of cows conceiving early in the mating period. The economic benefits from having a tight calving pattern centre on matching the cows peak lactation to peak pasture growth and improved herd reproductive performance.

Vis vaging is one of the management tools which can help improve herd conception/incalf rates. A recent study showed that cows which were infected at vis vag time had a 17% lower 6 week in calf rate and an 11% lower 21 week in calf rate if not treated compared to non-infected cows. When infected cows were treated they had a 20% higher 6 week in calf rate than their non-treated counterparts. Additional savings can be made by identifying infected cows and not using expensive semen on them until treated and clear.

Vis vaging involves inserting a speculum into the vagina and visualising the cervix/vagina. We can then identify the cows that are infected and appropriate treatment can be given. It is important to carry this out at least 2 weeks prior to Mating Start Date to allow time for the treated cows to clean up.

What cows should we look at? Ideally the entire herd. A common misconception is that if a cow is cycling she will not be infected - **this is not always the case!** Dirty cows can cycle, but the likelihood of conceiving is low. If you choose not to inspect the whole herd, then at a minimum, target the high risk cows. This group includes all induced cows, those which had retained membranes, twins, assisted calvings or milk fever, or have had a vaginal discharge. Infected cows are treated with an antibiotic infusion into the uterus. The products we use have a nil milk withhold.

RESPONSIBLE DRUG USAGE

The responsible use of prescription medications in food producing animals is a constant topic in the media and for good reason. Use of all medications for animals are under constant review and many medications are banned, even after many years of use, due to new information or concerns from consumers and regulators. These bans, even if in other countries affect Australia due to our export markets. A recent example is the banning by the EU of oestrogen use in food producing animals.

Many of the medications used in animals are also used to treat humans and can have serious implications if misused. Withholding periods for milk and meat are in place to ensure that these drugs do not enter the human food chain. Prescription medications are only allowed to be used in species for which they are registered and at the dose rates that they have been tested at. Any use of these medications outside of these parameters will influence the withholding periods and the prescribing veterinarian is responsible for setting the new extended withholding period.

The medications used in cattle are controlled by the same regulations as medications prescribed by doctors and dispensed by pharmacists. This is not surprising as many of the medications are similar although the cattle preparations are often more concentrated than equivalent human preparations. This can make some cattle medications dangerous to humans and there have been recent recorded deaths from cattle medications including prostaglandin.

The other main area where care needs to be taken with prescription animal preparations is antibiotic usage. There are only a small number of antibiotic classes registered for use in cattle and this is unlikely to change in the foreseeable future. As the number of different antibiotics is small, care needs to be taken not to promote resistance in bacteria to these drugs. Work in America and Europe where there are more antibiotics that are able to be used in cattle has shown considerable resistance in bacteria to some antibiotics due to misuse and overuse. Even in Australia a recent report showed that 10% of Salmonella strains were resistant to 4 or more classes of antibiotics. This is a real concern. The same report showed significant resistance to each of the main antibiotics we use in the treatment of Salmonella. These figures are not reflected in our district due in part to the low amount of overuse and misuse of antibiotics on our farms at this stage.

These figures highlight the need to take care in our use of antibiotics because if resistance develops we have limited choices that are registered for cattle and the price of the newer classes tends to be substantially higher than the old classes of antibiotics.

With responsible use of our prescription medications and close consultation with Smithton Veterinary Service, problems can be avoided, the health of your animals maintained, costs of treatments minimised and the future and health of the cattle industry in our district secured.

For Sale

Second hand cow jack (cow lifting device) -
\$800 including GST
(New price \$1540)

For details please contact Craig
at the clinic

Mythbusters!!

Myth: *Administering oxytocin post-calving will ensure a cow passes the foetal membranes quickly.*

Fact: Oxytocin blood levels become elevated during calving in response to stretching of the cervix and birth canal. Anecdotally and some research suggests, that the early administration of oxytocin (within 6hrs post-calving) may reduce the incidence of retained foetal membranes. The effectiveness of continued administration of oxytocin beyond this time is debatable. Forty-eight hours after the start of calving the uterus is no longer responsive to oxytocin.

Myth: *Inducing heifers just before calving is an effective way of reducing calving problems.*

Fact: The majority of foetal growth occurs in the last third of gestation where the calf triples its weight. This rapid increase in calf size does however taper off significantly in the last 2 weeks of gestation. A calf will only grow about 100-200g/day in the last 2 weeks of gestation. Inducing cows in late gestation, ie only 2 weeks from their due date, will only decrease birth weight by 1-2 kg. Therefore, inducing cows at this time will have minimal influence on reducing the incidence of calving difficulty. The only benefit of inducing at this time is the closer observation of these animals to provide assistance if necessary. To reduce calf size by an appreciable amount, inductions need to be done several weeks before calving.

Myth: *Injecting infected cows with PG or oestrogen within 2-3 weeks after calving is an effective treatment for RFM's and metritis.*

Fact: PG used within 3 weeks of calving is not an effective treatment for metritis, with some studies showing a negative effect. However, if a cow has been calved for a long enough period, is cycling and is at the correct stage of her cycle to respond to PG, then inducing heat with PG may be of benefit. Other studies have shown that the use of oestrogen (now banned in food producing animals!) is not beneficial and may have a detrimental effect on subsequent fertility. At present, infusion of an antibiotic preparation into the infected uterus remains our treatment of choice.

Salmonella Seminar

Thanks to all who attended the Salmonella Seminar last month. We are grateful to our sponsors Intervet, and Kate Woodward who increased our knowledge of the disease. The night was very informative and it was great to have farmers share their experiences of the disease. Congratulations to John Hunt and his team and Ben Popowski who took home the drench in the raffle. If anyone missed the presentation, has further queries on Salmonella or would like a cost-benefit analysis for vaccination carried out on their farm, please feel free to contact the clinic.



QUIZ

(Answers from the newsletter please)



- 1) **List 3 signs of possible heat in cows?**

- 2) **Injectable antibiotics mean higher cure rates of mastitis. True or False?**

- 3) **How many grams per day does a foetus gain in the last 2 weeks of pregnancy?**

- 4) **What % of Salmonella species were resistant to 4 or more antibiotics in a recent survey?**

Name: _____

Phone: _____

Drop your entry into Smithton Veterinary Service, or fax to 6452 1221