

July 2019

Non-steroidal anti-inflammatory drugs (NSAIDS)

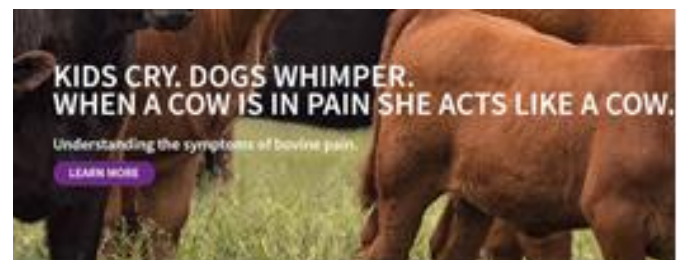
Hello! This month's newsletter is about non-steroidal anti-inflammatory drugs (NSAIDS). Controlling pain in animals is paramount to safeguarding welfare. For years, farm animal analgesia (pain relieving drugs) and pain management has lagged behind that of companion animals, so has the attitude of farmers and vets towards pain. In the last decade, more products have become available and their benefits researched in greater detail.

A study in 2014, published in the veterinary record, found that male vets and those born before 1990 scored pain severity in cattle significantly lower and were therefore less likely to use NSAIDS in cases where they were indicated. Signs of pain are not always easy to spot in cattle - as prey animals they have adapted to be incredibly stoic! But this doesn't mean they can't feel it and therefore pain relief should be used **without fail** when we are carrying out painful procedures such as disbudding and castration. Not only will this result in better welfare, but it will help prevent the procedure knocking them back, as it will reduce the level of the stress hormone (cortisol) that is produced.

One study showed that growth rates of calves given Metacam at disbudding were considerably higher for the following 15 days in comparison with those not given Metacam (difference of around 100 grams weight gain per day, 1.5 kg overall). Increased levels of cortisol result in immunosuppression, this can be a gateway for other diseases such as pneumonia in calves.

Signs of pain in cattle

Signs of pain in cattle can be very subtle. Teeth grinding, facial expression, head carriage, vocalization and an arched back can all be signs of pain. One of the most obvious outward signs of pain we see on farm is lameness. Early detection and prompt treatment increase the chances of the best outcome. A recent study of lame cows looked at the benefit of giving NSAIDS. Cattle either received an NSAID 15 minutes before a trim and block or did not receive it prior to treatment. The study found that blood cortisol was lower immediately after treatment in cows that had received an NSAID. Other studies from the University of Nottingham have found that cure rates are greater in cattle that receive a block and an NSAID compared to those that just have a block or just have a trim. Zero milk withhold products are available for milking herds; we commonly use Rimadyl and a block when treating lame cows with claw horn lesions, so there is no good reason not to use them.



Mastitis and Metacam

It is well known that a case of mastitis has a negative effect on fertility. A recent study looked into the effect of Metacam in mild to moderate cases of mastitis in an attempt to evaluate the impact on fertility and the financial benefit of using Metacam alongside an antibiotic.

Cows were assigned to one of two treatment groups. All cows received two to four tubes of intramammary antibiotic therapy, but one group also received Metacam, whereas the other received a placebo. After the treatment, they compared all their fertility data including number of services and pregnancy diagnosis through to if they were culled in that lactation. Milk samples were also taken before and after treatment to assess bacteriological cure rates.

The Results showed that using Metacam in cases of mastitis had a huge positive impact on fertility. Conception rate at first service in cows that had been treated with Metacam increased from 21% to 31%.



When using Metacam alongside intramammary antibiotics, the number of services required to achieve conception was lower (2.43 vs 2.92) and the percentage of cows pregnant by 120 days after calving was higher (40% vs 31%). Bacteriological cure rates of mastitis were higher in cows that had received Metacam. This information was then used to calculate the cost effectiveness of using Metacam in the treatment for mastitis.

Returns	
Returns on sold milk	Down £36
Costs	
AI costs	Down £20
Calving costs	Up £4
Treatment costs	Up £12
Replacement costs	Down £67
Net economic benefit of Metacam treatment	£35

Costs will obviously vary between farming systems but all the scenarios in the analysis showed a net economic benefit for treatment of mastitis with Metacam this ranged from £15 to £56 in the study.

Pain relief in sheep

There is no licensed product for NSAIDS in sheep. We use Metacam at a higher dose of 1ml/20kg SC in sheep (not young lambs) and find this to be incredibly effective.

I hope this newsletter has been a useful summary of why NSAIDs are so important; they improve welfare, which in turn results in increased profitability.



Phoneline Update!

To filter calls to the office, from the **1st July** there will be a third option (to book your TB test). The options are now:

- Option 1 - Visits/emergencies/general enquiries.**
- Option 2 - Medicine orders/shop.**
- Option 3 - TB visits/enquiries.**

And Finally, we are proud sponsors of the South Gloucestershire show held on 3rd and 4th August. All the details can be found on the website. www.southglosshow.co.uk



We look forward to seeing you there!
All the best
Georgie

