

# ROLE OF VET AND NSAIDS IN IMPROVING ANIMAL WELFARE

Difficult lambing will benefit from NSAID pain relief.



THE welfare of farm animals remains a frequently discussed and researched area into what more can be done by both farmers and vets.

Pain is a significant response that is detrimental to animal welfare, and in farm animals can be difficult to assess, quantify and treat. Other than local anaesthetics, corticosteroids and sedative medicines, only NSAIDs can be prescribed to control and manage pain in food-producing animals.

Corticosteroids provide anti-inflammatory action that is useful for certain types of inflammation – for example, soft-tissue swelling – but comes with the risk of abortion, delayed wound healing and immune suppression, which makes their usefulness, as well as their pain relief action, limited in most farm animals.

This article will summarise the different NSAIDs available in practice and highlight their uses, both on and off licence, as a result of scientific data and first-hand experience. It is vital NSAIDs are used to provide pain relief and improve animal welfare on UK farms.

## Make your choice

Choosing an NSAID in practice will be influenced by many different reasons. Priorities for the

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discusses the different NSAIDs available for large animals on farm, and highlights their uses

choice may change according to the type of animal treated and the problem encountered. For the purpose of this article, it is assumed all large animal vets have all NSAID active ingredients available to them – brand names will not be used.

Licensed NSAIDs in the UK are carprofen, flunixin meglumine, ketoprofen, meloxicam, and tolfenamic acid. The choice will be influenced by the route of administration, duration of action, milk or meat withhold period, dose and, of course, licensed therapeutic indications, where possible.

The medicinal products vary in their degree of action against endotoxaemia and pyrexia, as well as their anti-inflammatory action at various sites of the body. They are all good anti-inflammatories and, therefore, all provide pain relief for farm animals.

Each product differs in its licensed indications, and we know many conditions are painful, for which we must use the products on cascade, thereby incorporating a standard with-

hold period in the treatment plan where appropriate.

## Signs

With signs of pain in farm animals often vague and hard to define, it becomes difficult, in some circumstances, to determine both whether NSAIDs would be useful and whether they have worked. When obvious signs of inflammation are present, it is clear NSAIDs will reduce the pain and suffering of an animal directly through their anti-inflammatory action.

It has been known for several years that, in many species, preventing pain sensitisation is superior to acting on treating the pain. This is why many vets and farmers have seen an improvement in animal demeanour and response when, for example, pain relief is provided prior to surgery.

As NSAIDs are the only licensed form of pain relief for surgical procedures alongside local anaesthesia, once the decision to operate has been made, the sooner the anti-inflammatory can be given, the greater the reduction in pain wind-up occurs. This includes procedures such as caesarean sections, left-displaced abomasums and castrations, as well as disbudding or dehorning.

Furthermore, administering NSAIDs in cases of dystocia has been proven to improve the outcome and return animals that have had a difficult birthing process to productivity. Aside from epidural anaesthesia, good nursing and management, this is the only other option available to improve the welfare of farm animals around calving or lambing – the most hazardous and critical period in an animal's productive life.

Signs of pain include restlessness, inappetence, drop in productivity, changes to normal behaviour and demeanour, along with any obvious swellings or an increased body temperature. Obviously, painful conditions include lameness and skin wounds, but evidence exists to prove other conditions, such as mastitis, are also painful and result in lower performance of the animal.

Sometimes sick or uncomfortable cows demonstrate signs consistent with pain, but without any obvious external symptoms. In these cases it seems prudent to offer pain relief in the form of anti-inflammatories, as we are still expecting these animals to perform, whether it is in growth, pregnancy or milk yield.

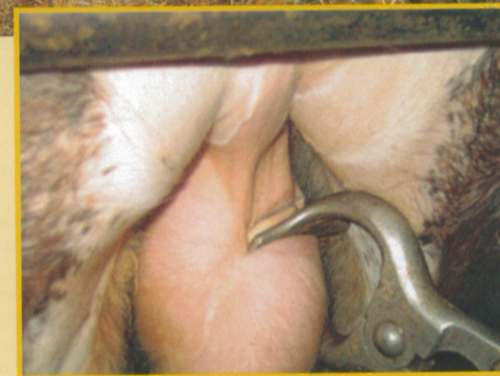
Monitoring the efficacy of pain relief involves assessing animals for the absence of signs of pain, as well as demonstrating the normal productivity that would be expected – depending on their age and use.

Adjunctive methods of pain relief should not be ignored and, in some situations, provide vital highly effective pain management. These include blocks on feet to prevent weight bearing on affected claws, deep bedding, bandages to reduce abrasion and exposure to slurry or water, small group sizes to reduce competition and stress, alongside the ease of availability of food and water for animals that are painful, pyrexia or sick.

## Vet's role

The role of the veterinarian in using NSAIDs as pain relief in farm animals becomes clear. Through using the product in animals to prevent the build up of pain, and in response to signs of pain and inflammation, we provide pain management to improve animal welfare daily.

We also expose farmers to these NSAID products, hopefully explain the response they see, and give them the benefit



Castration is a painful procedure and requires analgesia.

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of increased productivity and, therefore, potential profitability on farm. Vets are, therefore, well placed to educate farmers through their own actions, farmer talks and discussion groups, as well as by providing on-farm protocols – reminding all farm staff about the available products.

Farmers are frequently reminded in the farming press and by milk buyers and farm assurance groups about the importance of animal welfare, both at the immediate animal level, and also from a consumer perspective. With vets emphasising this same message, it helps to convey the point to farming staff in all types of enterprise.

## Summary

The use of NSAIDs on UK farms is vital to form the basis of any pain management programme. Several NSAIDs are available and the product of choice will depend on the indications for its use, as well as the dosing regime and method. Good nursing care and man-

**SPOTLIGHT**

This article is part of our regular Spotlight series of clinical and topical features aimed specifically at the large animal veterinary practitioner

agement should always be encouraged, alongside the use of anti-inflammatories, with the vet well-positioned to educate farmers about pain recognition and management in their animals.

Through encouraging the use of NSAIDs in farm animals, vets play a vital role in ensuring their welfare is managed as well as it can be on all farms. ■



Pain-free animals are productive and, therefore, profitable.