Europe IFAH
Representing the European Animal Health Industry

Managing and alleviating pain and inflammation in food-producing animals

FACT SHEET

Inflammation or pain in farm animals is due to a variety of health conditions and impact the animals' welfare as well as their production capabilities. For instance, a cow or a sow with acute mastitis will experience pain and produce less milk of a lower quality.

Characteristics

Inflammation is the reaction of a part of the body in response to an injury or an illness such as a bacterial infection. The classical signs of inflammation are pain, heat, redness, swelling, and loss of function. The inflammatory reaction is primarily beneficial as it initiates the body's repair processes. However, this reaction can become exaggerated and turn harmful to the body. For example, inflammation triggered by pneumonia causes more long-term damage to the lung tissue than the actual bacteria which caused the disease in the first place. In addition, the pain may also have a significant impact on the animal's welfare.

Effective control of inflammation

Prevention or minimisation of pain and inflammation are very important aspects of good livestock management. Non-Steroidal Anti-Inflammatory drugs (NSAIDs) are used to treat sick or injured animals. They decrease fever and inflammation as well as reduce pain, which in turn decreases the healing time and improves the animal's appetite.

NSAIDs have several effects:

- they reduce inflammation
- they reduce fever
- they prevent or treat endotoxaemia/blood poisoning
- they are pain killers (analgesics)

How does control of pain and inflammation help farm animals?

- **Lameness in farm animals** is a painful experience that impacts their welfare. Lame cows, for example, lose weight, eat less, don't get pregnant and produce less milk. Quick and effective treatment of lameness is important and should include hoof trimming and alleviating the pain using an NSAID and hoof shoes. Lameness in sows is a welfare concern that requires effective pain relief.

- **Mastitis in dairy cows** is characterised by inflammatory changes in the mammary gland, such as heat or swelling and noticeable changes in the appearance of the milk. Using an NSAID to reduce the inflammation and pain makes management easier, speeds up recovery and will ensure good quality milk again. In sows, control of Mastitis, Metritis and Agalactia syndrome (MMA) - a bacterial infection of the mammary glands

Xxxx Succes anti-inflammatories

(udder) and/or the urogenital tract - requires an effective control of both the inflammation and pain by using an NSAID.

- **Calving difficulty** such as prolonged and very difficult birth decreases calf viability, milk production, and fertility and increases the risk of death. The impact on fertility and milk production occurs because of the increased risk of inflammatory disease such as metritis (inflammation of the wall of the uterus) during such a difficult birth. In addition, it is also painful. Anti-inflammatory medicines play a therapeutic role in alleviating the impact of the inflammation and pain associated with the birth-process.

- **Acute calf pneumonia** is caused by viruses or bacteria, or both, and antibiotics are required for a successful treatment. Giving an NSAID along with antibiotics speeds up recovery by reducing the temperature and coughing, and causing a quicker return to normal food intake and weight gain. NSAIDs reduce lung damage and may prevent long-term effects of pneumonia on cattle health.

- **Calf dehorning** is a painful procedure. Combining a local anaesthetic with an NSAID eliminates the pain for hours and days following dehorning. Pain relief may have a positive impact on the health and growth of the calves, and will certainly make their lives better following the procedure.

- **Surgery** is sometimes needed for food-producing animals. Using a local anaesthetic is necessary to prevent the pain caused by the surgery itself. Longer term inflammation and pain relief require the use of an NSAID, which should be administered after surgery for claw removal, caesarian section, surgery for hernia treatment, abdominal surgery for LDA[1], as well as for other conditions. NSAIDs are also helpful for serious injury and fractures. Pain relief will help the animals regain their normal food intake and speed up their return to full productivity.

Useful links

- **VikiVet:**
  http://en.wikivet.net/NSAIDs

IFAH-Europe is the representative body of manufacturers of veterinary medicines, vaccines and other animal health products in Europe. IFAH-Europe's membership covers 90% of the European market for veterinary products. Member companies invest over €400 million in research and development every year. IFAH-Europe promotes a single market in veterinary medicines across the EU ensuring the availability of medicines to protect the health and welfare of animals.

[1] Left displacement of the abomasum (the rennet-bag or fourth stomach compartment of ruminants)
Xxxx Succes anti-inflammatories