

Implementing pain management into your beef cattle practice

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Abstract

Implementing pain management practices in typical production settings may present real and perceived challenges for US beef cattle practitioners. Convincing producers, and sometimes, fellow practitioners, that pain management strategies and practices may benefit cattle welfare and potentially contribute to health and/or performance benefits is not always an “easy sell”. Additionally, practitioners and clients may be concerned with the legality, cost, and feasibility of implementing strategies in typical beef cattle production environments. Provision of education and training, demonstration of their use in typical production settings, and communication of relevant guidance resources may empower interested beef cattle veterinarians to increase the use of pain management practices.

Key words: beef cattle, pain management, welfare, analgesia

Introduction

The effectiveness of local anesthetics and/or systemic analgesics for bovine pain management has been well established.^{2,9,10} Potential performance benefits associated with the use of pain management in beef cattle have been reported by Coetzee and others.³ A recently published survey showed that opportunities still exist to expand the use of local and systemic analgesia by both producers and veterinarians.⁷ Results of this survey suggested that concerns regarding compliance with federal regulations as well as pharmaceutical expenses were important obstacles to implementation of pain mitigation.

Discussing the use of pain management protocols with colleagues and producers

A very wise woman, US Navy Rear Admiral Grace Hopper, said: “*The most dangerous phrase in the language is ‘we’ve always done it this way.’*” This quotes our human tendency to get comfortable with conducting procedures a certain way and resist modifying them. The introduction of pain mitigation for procedures or diseases that have not traditionally been addressed can be a sensitive subject for veterinarians and producers. When considered in the context of implementing local and systemic analgesia, more recently minted veterinarians may encounter resistance from more seasoned practitioners as well as producers. Keep in mind

that many practitioners who attained their veterinary degree prior to 2010 were not trained in the use of pain mitigation for cattle and, though pain management in cattle is not an uncommon continuing education topic, may not be comfortable in performing pain mitigation procedures or confident that their use provides any real benefit. Painful procedures for beef cattle such as dehorning/disbudding and castration are often performed by the producer. Producers that perform these procedures themselves without pain mitigation may be resistant to its addition. Often these procedures are performed during “calf works” or branding, which are typically time-honored, culturally, and traditionally important events. Establishing credibility and investing your time in observations and conversations that help you understand the thinking behind a practice or operation’s resistance to pain management protocols is critical before any attempt at suggesting modifications is made. Your colleague or client must be convinced that some aspect that they value will be improved if a particular pain management protocol is implemented, that the suggested pain management protocol is not a legal liability, and that the perceived inconvenience or costs are outweighed by the potential benefits.

Implementing pain mitigation/management protocols

Once a colleague or producer is willing to consider implementing a method of local or systemic analgesia, they must become comfortable with the procedure or method. For producers, this will likely require hands-on training and education, which has been shown to be successful in increasing confidence.⁴ Multiple published resources outlining local and systemic analgesia for cattle are available. For example, the American Association of Bovine Practitioners (AABP) website contains an excellent resource, developed by Martin et al,⁸ on approaching pain in cattle using local and systemic analgesia and is available at https://aabp.org/committees/resources/Pain_Brochure_8-15.pdf. Excellent educational resources for practitioners have also been developed by Dr. Meredyth Jones and can be accessed using the information in the resources listed below. The continuing education modules, which are approved by the Registry of Approved Continuing Education (RACE), provide affordable, high-quality, and practical training for the use of local anesthetic techniques.

Establishing and maintaining a veterinary-client-patient relationship (VCPR) is crucial when developing and implementing pain management protocols for producers. The AABP has developed guidance and critical components

for establishing and maintaining a VCPR.¹ Currently, the only FDA-approved drug treatment of pain in cattle is flunixin meglumine (only for the treatment of pain associated with foot rot). All other use of local or systemic analgesics or anesthetics is considered extra-label drug use (ELDU), which is permitted by AMDUCA when used in the context of a VCPR.⁵ Veterinarians are also responsible for providing appropriate guidance for avoiding potential residues by providing recommended withdrawal times. The Food Animal Residue Avoidance Databank (FARAD) is an invaluable resource for ELDU advice and residue avoidance management.⁶

Following is a list of resources that are helpful in implementing local and systemic pain management strategies in your practice.

- American Association of Bovine Practitioners. Establishing and maintaining the veterinarian-client-patient relationship in bovine practice. March 2020. Available at: https://www.aabp.org/resources/aabp_guidelines/VCPRGuideline_032020.pdf
- American Association of Bovine Practitioners. Castration Guidelines. August 2019. Available at: https://www.aabp.org/Resources/AABP_Guidelines/Castration_Guidelines-2019.pdf
- American Association of Bovine Practitioners. Dehorning Guidelines. November 2019. Available at: https://www.aabp.org/Resources/AABP_Guidelines/Dehorning-2019.pdf
- American Association of Bovine Practitioners. Approaching pain in cattle. Available at: https://aabp.org/committees/resources/Pain_Brochure_8-15.pdf
- Food Animal Residue Avoidance Databank (FARAD). Phone: 1-888-873-2723; <https://www.farad.org>
- Large Animal Consulting & Education. Online CE Courses for Large Animal Veterinarians. Available at: <https://largeanimalce.com/>
- Extralabel drug use in animals. 21 CFR 530. Available at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/CFRSearch.cfm?CFRPart=530>

Conclusion

Pain mitigation strategies can be practically applied in many circumstances common to beef cattle practice. Appropriate local and systemic analgesia for beef cattle should

be considered whenever feasible. Provision of education and training, demonstration of their use in typical production settings, and communication of relevant guidance resources may empower interested beef cattle veterinarians to increase the use of pain management practices. We should consider the quote attributed to Maya Angelou: “Do the best you can until you know better. Then when you know better, do better.”

References

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