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All dehorning should include pain control

How should we minimize pain when we are dehorning the young calves on our farm?

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Most dairy cattle in the U.S. are disbudded (removing the horn producing skin cells before attachment to the skull) or dehorned (removing the horn after it attaches to the skull) using either caustic paste or thermal, hot iron methods. It is generally accepted that the earlier calves are disbudded, the better.

Caustic paste can be applied on calves less than 2 weeks of age; however, we like to see it applied to calves less than 24 to 36 hours old when they are less mobile, less likely to rub it off, and before horn development. Hot iron disbudding should be performed as soon as you can feel the horn buds during the first few weeks of life. While it is obvious that hot iron disbudding is a painful procedure, research has demonstrated that caus-

tic paste is also acutely painful, even when it is applied at a young age.

So, regardless of how and when you disbud your calves, pain control is necessary to keep your calves as comfortable as possible both during and after the procedure. Fortunately, we have three methods for combating the pain associated with disbudding calves: local anesthesia, systemic analgesia, and mild systemic anesthesia (or sedation).

Local anesthesia is the best way to stop acute pain. Commonly called "nerve blocking" because an injection of lidocaine under the skin and around the nerve "blocks" pain signals to the brain, nerve blocks numb the area around the horn bud for a couple of hours. This is just like an injection of novocaine prevents you from feeling your mouth during a dental procedure.

Systemic analgesia means giving either an oral or injectable medication that reduces general pain sensations.

This does not block out the acute pain from burning or paste application, but it reduces the longer standing, more chronic pain that occurs from the thermal or caustic injury to the skin after the procedure.

This is like the ibuprofen that you take before and after going to the dentist for that root canal. You're still going to want the novocaine, but the Advil makes you feel better afterward, and taking it ahead of time means it will be working by the time the procedure is over and the novocaine has worn off. Oral meloxicam is a nonsteroidal anti-inflammatory drug that can be used in an extra-label manner through your veterinarian to provide systemic pain relief for disbudding.

A short acting sedative, such as xylazine, can also be administered in combination with the nerve block and oral medication. Sedation will make the calf act calmer and in some animals, it might make it easier to administer the

nerve block. When using sedation, you should still provide a local nerve block and systemic analgesia.

Combining a lidocaine nerve block with systemic pain medication, such as meloxicam, provides excellent short- and long-term pain relief and should be considered standard care when disbudding calves. These medications are relatively inexpensive, but they all require a veterinary prescription.

Your veterinarian can administer the medication and perform the procedure. More commonly, they can train you how to administer the medication, and through a valid veterinarian-client-patient relationship (VCPR), they can dispense the appropriate medications to be used for dehorning in their absence.

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