Dehorn calves early

by Aurora Villarroel, D.V.M.

With growth in concern about animal welfare regarding common procedures with farm animals, dehorning without the use of anesthetic is becoming a contentious issue. Research is being conducted on the use of different pain medications and sedation protocols during dehorning, mostly involving calves that are several months old and drugs that need to be administered by a veterinarian.

The most common methods used for dehorning calves are the hot iron and the Barnes or scoop dehorner. Both have their drawbacks, however. With the scoop dehorner, you have to wait until the horn is big enough. The hot iron can be used from birth, but both cause pain at the time they are applied and have an acute effect. Caustic dehorning paste is rarely used on farms in the United States, and I keep hearing dissatisfaction among dairy farmers who have tried it. But in my experience dehorning paste is actually the best method available. However, you need to pay attention to two things to make it work well: timing and housing.

Dehorn before 2 days of age

The secret for the dehorning paste to work well is to dehorn before 2 days of age! The main reason is that after 2 days of age calves figure out how to scratch their heads against something to rub the paste off, and they can stand on three legs to scratch with the other. Additionally, you will not see calves show as much pain as when they are older. There will be some head-shaking, which can be minimized by feeding calves right around the time of applying the paste.

Research performed in human babies shows that giving breast milk, glucose or sucrose before a single painful procedure significantly reduces heart rate and crying time compared to using distilled water, swaddling, or using a pacifier. Therefore, an easy trick is to apply the dehorning paste and feed the calves immediately with a nipple. By the time they are done with the bottle the paste will be almost done with the dehorning process.

Good housing is important

Make sure that calves are housed under a roof, especially when it rains, for 24 hours after applying the caustic paste. The reason is, if rain falls over the active dehorning paste, there will be runoff toward the eyes that can blind the calf: The paste will dry in one day.

Procedure

The accompanying pictures show each step of the procedure for appropriately using dehorning paste. Clipping the hair (shavers or clippers) and using a Sharpie marker to locate the horns makes it easier to apply the paste in the correct spot each time. The amount of paste to apply on each horn is equivalent to a dime, as indicated in the package insert. Make sure to wear gloves when using the paste, as it is very caustic. Using too much paste is the most common mistake of beginners. It will result in a big bald spot around the horn area, but the hair will grow back in a couple of months.

Clients who have switched to paste dehorning at birth report great success, no complications, and they like that calves are "done" without showing pain. If you have any questions you are welcome to contact me at 541-737-3658 or by e-mail at aurora.villarroel@oregonstate.edu

Step-by-step paste dehorning process:

1. Locate the horn buds.
2. Trim back the hair.
3. Mark paste sites with a Sharpie.
4. Carefully apply caustic paste.
5. Paste that was just applied.
6. Paste after 24 hours

Caustic paste dehorning tools needed

The author is an Assistant Professor, Rural Veterinary Practice, in the College of Veterinary Medicine at Oregon State University.