

Pain Reliever

Lidocaine-infused bands minimize castration discomfort for young calves

BY MAUREEN HANSON



“In addition to weight gain, it’s also about doing the right thing for our animals and providing some type of analgesic relief during castration because we know it’s painful.”

—Eduarda Bortoluzzi, DVM

As consumer concern for animal rearing practices rises and industry awareness of animal welfare increases at the same time, food animal rearing practices are changing in step.

One of those practices is castration, a necessary yet painful rite of passage for every male animal destined for the beef market. A recent study at Kansas State University, presented at the American Association of Bovine Practitioners Conference in Ohio, demonstrated how lidocaine-infused castration bands can help calves transition through the castration phase more smoothly and comfortably.

In the study, 26 beef-cross calves under two weeks of age were banded with either the lidocaine-infused band, or a conventional castration band. Calves were individually housed for close observation and followed via 24/7 video surveillance for 42 days.

AMONG THE RESULTS, RESEARCHERS FOUND:

- **The calves treated with lidocaine-infused bands had more bouts of lying, and more total lying time, than those treated with conventional bands.**
- **The greatest disparity in lying time occurred between days 21 and 35,** which is significant because that is the typical time when bands start cutting through the tissue. “It is great to see the lidocaine-banded calves were comfortable lying down at a time that we often say is the chronic part of the pain related to castration,” notes Eduarda Bortoluzzi, DVM, and assistant professor of animal welfare in the department of anatomy and physiology at Kansas State University.
- **While weight loss would be expected immediately after castration,** calves receiving the treated bands gained a bit of weight the first week after castration, while those with conventional bands lost weight during the same time period — an indication that the lidocaine-banded calves returned to appetite more quickly.
- **At the end of the study,** the final bodyweight was an average of more than 3 lb. higher for the calves receiving the lidocaine-treated bands compared to those receiving conventional bands.

“In addition to weight gain, it’s also about doing the right thing for our animals and providing some type of analgesic relief during castration because we know it’s painful,” Bortoluzzi says. “I would use it to decrease stress during this period. We now have a type of analgesic that was unavailable before.” **BV**