

New Castration Chemical Minimizes Stress, Setbacks

With a new method of castrating bull calves, you can nearly eliminate castration stress and its associated problems.

That's the idea behind "Chem-Cast," a new injectable solution to castrate calves chemically and painlessly.

Developed and marketed by Bio-Ceutic Laboratories, Chem-Cast is available only through veterinarians.

The patented chemical solution is labeled for syringe injection into the testes of bull calves up to 150 pounds. According to Bio-Ceutic, Chem-Cast desensitizes and destroys the testes, leaving the calf castrated within 60 to 90 days after injection. After castration, no residue remains in the tissue.

'Practically Painless'

"It's practically painless," says Dr. Ivan Nicholson, director of Bio-Ceutic's professional services veterinarians. "About the only stress on the calf is the restraint."

Through a small hypodermic needle, Chem-Cast is injected from the top into the middle third of each testicle. Within 24 hours, Nicholson says, the solution will cause a painless expansion of the testes, testicular vessels and spermatic cords.

Within two weeks, the enlargement subsides, and the tissue begins to reabsorb and reduce in size. Within 60 days, nearly all the tissue is reabsorbed, leaving only tiny, hard nodules in the cod. Eventually, those also will be reabsorbed.

"Except for the absence of any scar, the animal appears surgically castrated," Nicholson says.

Company research and technical people emphasize that the new procedure does not cut or crush tissue and avoids the resultant stress and setbacks common to other methods of castration.

"There's been no good method of castration until now," Nicholson says. "It's been 'Do it and hope.'"

No Wound

"Any time you make an open wound, as you would with surgical castration, there's stress, bleeding and a chance for infection from flies or other carriers."

With Burdizzo, or "clamping" method, Nicholson says, "Calves have trauma, bruising and swelling. They may develop a secondary infection. Or, you can easily miss the (spermatic) cords, and still have a bull."

Use of bands to cut scrotum circulation is the worst method of castration, Nicholson says. "Bands cause an open wound for 30 days that can't heal."

With the old methods, Nicholson says, animals will exhibit pain and stress and will lose appetite. Weight gains are reduced or calves lose weight. If infections set in, calves may require treatment and, in severe cases, may die.

"You may find a calf dead, and not know

what killed it—lightning, coyotes, disease or castration infection. But death is not the biggest potential loss. The big losses come from that area between death and no problem at all," Nicholson says.

Shrink and Stress

"Calves will have an infection, but they won't die. It's an active infection the body has to overcome. That's where shrink and stress cause losses in performance.

"I don't think anyone would say there will always be complications, but there's always that economic risk with the old methods."

You can minimize risk by minimizing the stress of castration, Nicholson says. Fit castration into your program to help maximize calf performance.

Unless you have an established market for bull beef, castrate early. "The younger the better, regardless of the method used," Nicholson says.

Bull calves will wean heavier than steers, Nicholson admits, but they'll be discounted at sale. "Bulls castrated at weaning lose their advantage, because the stress and setback is worse then. If they sell through normal market channels, you can't show a benefit by leaving them intact that long."

The time to castrate is the first or second time you handle the calves, Nicholson says.

"In beef cattle, there's been a favorable trend the last 10 years toward 60-day calving seasons and processing all calves at the end of the calving season. In some areas, that's traditional branding time, or when herds go to summer pasture."

Less Stress

At that time, Nicholson recommends routine calf immunizations, castration and, if necessary, dehorning. At the young age, calves are easier to handle with less stress on you and them. "If you don't have to dehorn, calves castrated chemically shouldn't be set back at all. If you do dehorn, Chem-Cast will reduce the total stress substantially."

Nicholson says some beef and dairy producers traditionally tag and castrate calves at birth or when the calves are found. Chem-Cast can be injected then as well, Nicholson says, with less stress than other methods.

Nicholson expects the chemical method to be accepted in both the beef cow-calf and dairy calf business . . . "perhaps quicker in confined operations like dairy where producers are more able to see problems after knife- and Burdizzo-castration. And early weaned dairy calves are more susceptible to stress and infections.

"But I think well-managed cow outfits will use Chem-Cast, to complement a good health program. It will further reduce risk of economic loss. If you've ever lost one calf, or had some 'poor-doers,' because of a post-castration problem, you could have paid for a lot of Chem-Cast." **AJ**