Teat Dipping Heifer Udders Prepartum
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Much has been written about infusing the udders of heifers prepartum to reduce the incidence of mammary infections at parturition. Some studies have shown an economic benefit from doing this practice, while others have not. In a recent article I discussed the results of a nine herd study that showed a lowered incidence of mammary infections at parturition in heifers that had been infused prepartum, but no increase in milk production during the first lactation. The authors of the study cautioned producers about using prepartum infusions in heifers as a universal mastitis management practice. Herds with a high heifer mastitis incidence rate at parturition would be likely candidates for using this practice.

One of the challenges to giving prepartum udder infusions is how to administer them safely for both the heifers and people trying to give the infusions. This is one reason many producers have not implemented the practice. A research report presented at the 2006 National Mastitis Council meetings presented an alternative non-intrusive, prepartum treatment method for reducing SCC and infection levels in heifers at parturition that is worthy of consideration.

In a one herd trial conducted in Wisconsin, the effects of using a long lasting, dry cow external teat sealant applied to heifers prepartum was studied. Approximately two weeks before expected parturition, heifers were restrained in lock-up stanchions during feeding, and diagonally opposite quarters were dipped with the sealant. The other two quarters served as in-animal controls, plus another group of un-dipped heifers also served as controls. Between days 3 and 8 postpartum, quarter milk samples were taken from all heifers and SCCs determined. Clinical mastitis infections at parturition were recorded for all groups.

The trial results showed that the dipped quarters had significantly fewer clinical infections than both the in-animal control quarters and the quarters of the other control heifers (8.6% of quarters versus 18.6% and 22.4%, respectively). Additionally, SCCs were significantly lower in the dipped quarters versus the in-animal control quarters and the control heifers (about 201,000 versus about 307,000 and 394,000, respectively).

The results further showed that the distribution of the SCCs were lower in the dipped quarters. Approximately 71% of the dipped quarters had SCCs under 150,000, while only 57% of the in-animal control quarters and 51% of the other control heifers had SCCs under 150,000.

While the study was conducted in only one herd and a direct comparison with prepartum udder infusions was not done, the results are interesting and should be noted. The effectiveness of the practice will probably vary between herds, but since applying a teat dip prepartum should be easier and safer than administering quarter infusions, it may be a practice worth trying. Discuss this approach to heifer mastitis management for your herd with your veterinarian or other competent consultant.