

Vet's Corner: Metritis Not Associated with Retained Fetal Membranes

Rectal examinations of the fresh cow group at a different herd's weekly check revealed 14 of 20 cows with fetid, red, smelly uterine discharge. The farmer was totally surprised at our findings and insisted that only two of the cows retained fetal membranes and only one had an assisted calving. The cows are calved in a group bedded pack which was dry and had fresh sawdust every other day. How could so many cows have uterine infection? Was there a unique super bug infection on the farm?

Unlike other species of livestock, bacteria enter the wide open lumen of the cervix and infect nearly all cows after calving. In one study, 93% of the uteri obtained within 15 days of calving yielded bacteria, with the proportion of infected animals actually increasing from day 7 to day 14. This fact leads us to believe that contamination during birthing is not the only reason for infection.

Competence of the immune system is important in the prevention of the Metritis complex. The innate immune system is responsible for the elimination of bacterial contamination of the uterus after parturition. Liver function disorders suppress the functional capacity of neutrophils, which are the white blood cells that kill bacteria.

This led our investigation back to the close-up dry cow pen. Seven cows that were within 14 days of calving were blood tested and six had Non-Esterified Fatty Acids (NEFA) over 0.400 mEq/l. High NEFA indicates excessive fat breakdown and deposit in the liver. These cows will calve with impaired liver function that we commonly associate with ketosis and displaced abomasum. In addition to those problems, 14 of 20 cows in this herd had Metritis.

After the lab test confirmation, the nutritionist was alerted to the problem so close up dry cow ration could be reformulated to prevent negative energy balance. Strict sanitation during the calving process was reviewed with all workers that help in the maternity pen. And the dairy person redoubled efforts to bring clean dry cows into a clean bedded pack. On weekly herd health visits, all cows will be palpated 4-11 days after calving to monitor for improvement.

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