

Vet's Corner: Endometritis, another cause of EEM?

Endometritis is costing the dairy industry millions of dollars and is worthy of attention. Nearly all cows have bacterial infection of the uterus in the first 2 weeks postpartum. If the immune system returns to normal after calving and the degree of bacterial infection is not overwhelming, a majority of cows will naturally overcome infection and have normal fertility. Unfortunately, approximately 15-20% of dairy cattle will have clinical endometritis with a further 30% experiencing subclinical disease.

So what syndrome are we talking about? Clinical endometritis is the sick cow syndrome seen in the first two weeks after calving which has an enlarged uterus and watery brown, fetid discharge. Subclinical endometritis tends to occur later after calving and does not cause the cow to have fever or go off feed. The subclinical form is defined as a mucopurulent discharge detected within the vagina after 26 days postpartum.

Rectal palpation of fresh cows has been the most popular method used to diagnose subclinical endometritis. Since too many cases are missed by this method, rectal palpation is not considered to be a sensitive method of diagnosis. Ultrasound technology is useful in identifying some, but not all cows with endometritis. Ultrasound compares unfavorably to two new methods, but will continue to be evaluated in combination with one or both of the new tests.

Vaginoscopy is a useful method, which picks up three times as many cases as rectal palpation but still misses 40% of subclinical cases. The advantages of vaginoscopy are that it is amendable to routine on-farm use and allows for immediate action. The other new test is Interuterine flush or cytobrush cytology which requires skilled manipulation of the uterus and lab stain and microscopic exam. A combination of these techniques promises to be the most accurate predictor of subclinical endometritis.

So why do we have to worry about subclinical endometritis? Can't all cows just receive two prostaglandin (PGF) injections and be cleaned out enough to breed? For PGF to bring a cow into heat and evacuate the uterus, a palpable CL must be present for the PGF to lyses. Many high production or subclinical ketosis cows don't have a CL until 4 weeks in milk or much later and the PGF treatment won't work. Okay then, if PGF doesn't work all the time, why not just infuse all cows with Oxytet? Like most of the other intrauterine products it is poorly absorbed into the deeper layers of the uterus. How many times after infusion, have you seen the mucous clear up and return to pus flakes a few weeks later? This indicates a need for a more appropriate treatment and timing of the PGF injection.

Last month, it was stated that over 80% of breedings produce fertilized ova but if half make it to 40 day pregnant stage it is considered to be high fertility. In addition to the reasons for EEM given last month, subclinical endometritis should be added to the list of causes. If you avoid heat stress and rough handling at the time of A. I. service, provide proper transition cow housing and diet, and breed on properly timed synch programs or standing heat and are continuing to have poor Conception Rates; a more extensive investigation for the occurrence of subclinical endometritis by Vaginoscopy or Uterine cytology could be warranted.

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