

Chronic Vaginitis, Herd Problems, Diagnosis, Etc.:

Dr. Robert Ladue, Cherry Valley, New York

I am a practitioner in a four man practice in central New York State. We've been there nine years and do 95% dairy cattle. Our largest herd is probably no bigger than 250 cows, and most of them are closer to the 60 to 70 cow range. Last year there was an excellent paper presented at the AABP in Toronto on ureaplasma. One of the partners went to that meeting, came back, we discussed it, read the article when it came back and we all decided that we had certain herds that we had been working on that fit the picture that was described as a chronic and, sometimes, acute ureaplasma. The only difference was that we never saw it quite as severely as they as they did. We had probably 20 to 30 clients that had typical complaints of abnormal discharges 4-5 days after breeding in their herds. Repeat breeders, long heat cycles seemed to be very common for us and a high incidence of early embryonic death, which is a real problem for anybody who does programmed health work. You tend to hate to have people blame you for knocking calves out. All these problems seem to go together in these herds. The only other thing that we noticed was that every one of these herds was what we call an "assembled herd" where they are buying and selling cattle. We really had none that were "closed herds". There were people who had been raising cattle for a long time, only breeding artificially. We live about 150 miles from a laboratory that we can use to have ureaplasma, microplasma, or *Hemophilus somnus* samples run. And if you read the literature or listen to the people talk, you get the feeling that you can't get positive results unless you can get them in a car and run them to the laboratory within 12 hours. We almost felt it was a futile effort to try, but we called the Cornell laboratory and asked them exactly how they wanted to set up the procedure. We were going to try to send them in the mail and see what happened, because we were planning on doing quite a bit of culturing. We found that it is possible to send samples in the mail even longer than 48 hours and get positive ureaplasma, microplasma and hemophilus results. The quicker you get it there, the better the results. I am not saying you should sit around and be afraid to take the samples because you don't think you're going to get positive results anyway. For example, I pulled 3 samples from one herd at 9:00 on Friday morning, I put them on our transport media in my truck refrigerator and shipped them out that afternoon. They arrived at the Cornell Laboratory on Saturday, were put in a refrigerator and cultured on Monday. Two out of the 3 samples were positive for ureaplasma. Now that's a long time and I would not recommend trying it on the first samples, but it is possible to send them through the mail, if you do it right. Now, what we do is to determine which cows we are going to culture, and then we use a Teevlen swab. We sanitize the perineal area, do a rectal, and pass the swab into and culture the anterior vagina. We figure if we are getting a positive culture in the anterior vagina, we have a more likely diagnosis of ureaplasma as being a cause of infertility than if it was just from the vulvar lips. Then we remove the swab and place it directly into a refrigerated Amies medium. It's just a little bottle of what looks like charcoal. You put the swab in Amies, snap it off, label it and put it right into the truck refrigerator, or on ice. When we get back to the clinic, we pack it with ice, send it off, and I believe that you can have good results testing for all three—

ureaplasma, microplasma, and *H. somnus* this way. We've had very good luck. You probably know when you've got a ureaplasma problem, and I do not doubt that you could. Since the treatment is not so good anyway, you could recommend a general procedure and you could be very accurate with your client, with no trouble. But we find that without the positive cultures we have a hard time educating the clients that they have this particular problem. There are only a few things that can be done to help and there is no cure. When we talk about it without positive culture results, even if we try to educate them and we say we are sure you have ureaplasma, but we haven't proved it, we find that the first red truck that comes down the road sells them a bottle of magic, and we are off the program! So I really advocate culturing these techniques.

The other thing that I really like culturing for is early embryonic deaths. This is something we have picked up and I don't know how many people have done it. If we can culture an early embryonic death within 2 to 3 days after the cow drops it, or preferably if we get a fetus in the amniotic sac, we've got 100% positive cultures when we get the fetus in decent condition and we can get a sterile culture of the fluid inside the sac. Now this has only been 3 but we've had 2 microplasmas and 4 ureaplasmas on this type of early embryonic death culturing and we've had better than 50% success on culturing either *H. somnus*, microplasma or ureaplasma from the interior of the uterus, not the cervix and vagina, on cows that have had a very recent embryonic death. This has been a real boom for our work because the early embryonic death problems has always been the type of thing you throw your hands up in the air and say you don't know why they are doing it and it is always in storms and small herds. Before you send your samples in, make sure your laboratory runs them because not all laboratories do so.

Question: Could we have the name of the medium please?

Answer: The name of the medium is Amies. You can usually get it from the laboratories where you're sending it, or we usually get it from American Scientific Company. They have a real big catalog of that type thing.

Question: How many Hemophilus cases have you seen?

Answer: We have not seen Hemophilus in pure culture except in early embryonic deaths. We have seen mostly Hemophilus riding on top of ureaplasma. It seems that the worst ureaplasma problems also have Hemophilus, but that is a very clinical impression. We are doing what the Canadian veterinarians have recommended, but we are not having as much luck as they had, in our opinion, maybe we're not fighting it as hard as they are. We do not have the type of tetracycline that they are using which they felt was pretty important, but mostly what we are doing is using the double straw on the breeding, double straw on post infusion, and in most cases we are only infusing repeat breeders, not first insemination.

Intraperitoneal Lavage:

Dr. Mark, Enterprise, Oregon

We have done this a number of times on cows from which an emphysematous fetus was taken by Caesarean section. The surgery is done with the cow standing, supported in