

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

a squeeze chute. The left flank approach is used. In our hands this results in serious contamination of the peritoneal cavity, with hair from the calf and necrotic material from the uterus. After the uterus is sutured and returned to its normal position, an equine stomach tube is connected by a hose to a mixing faucet. The end of the tube is carried into the peritoneal cavity and an assistant delivers warm water as requested. The tubing is moved about and water continues to be discharged until the overflow through the incision is clear and free of foreign material. The free end of the tube is then carried to the floor of the abdomen and the other end is disconnected from the water supply. The excess water is siphoned out; antibiotics are left in the abdominal cavity and the incision closed as usual. The cow is kept on antibiotics for a week or so. About 80% of these cows have survived, using this procedure.

Dr. Koger: I guess no one can argue with 80% recoveries in emphysematous feti.

A Practical Approach to the Correction of Breeding Unsoundness:

Dr. Connie Ferreira, Cottonwood, California.

I practice in Shasta County in Northern California and I am in a 2 man practice. We have 3 occasionally, but we are now in a 2 man practice and we do a lot of bull evaluation. My hospital is part of the complex of the Shasta Livestock Auction Yard and we put on about 10 or 12 purebred sales a year and we do about 1500 evaluations on bulls. In doing this I want to kind of step on the doctors from Nebraska here. We are doing the footwork and were using various types of equipment and I do want to show you some that we are using and have used. My comments will be directed toward the pure-bred cattle. We have an in-house foot trimmer and it certainly enhanced the income of our practice. He's been with me for 27 years! He's a Mexican and he can trim a bull's feet and get him out of chute as fast as I can do the semen evaluation. I think that it behooves practitioners, particularly I know the older practitioners are cognizant of foot problems, and I think a lot of emphasis is given to the semen evaluation *per se* and maybe we're not looking at these feet as well as we can and I think that probably why we as practitioners really hate to fool with a 2000 pound bull's feet is that it hurts you!

I used an old Powder River, I'm sure you people from Oregon and Washington have seen a lot of these. They're still available. We don't use this any more. We've got it sitting out in the yard, but this is all we had when I first started practice. It does not lie the animal down, of course, but it does get his foot up where you can tie it and he doesn't kick your head off. The people from Nebraska had essentially the same chute as our latest one. It has a side panel which is manually operated. I will have to agree with the Doctor from Nebraska, that we have never found a chute that we can do foot trimming in and not choke the bull down or have problems with a bull that weighs 2000 or 2200 lbs. I have to give credit to my foot trimmer who devised a chute that cost about \$350 and I've looked at several priced from \$2500 to \$5000. We have three good chutes on ranches in our particular area, none of them work as this one does. We use the Black and Decker sander and you can get them at any machine shop, I agree with the doctor, you can just whip those out in nothing flat and there are other

sanders. One costs \$69.50 and we have a \$189.00 sander. We have an old firing iron made by Nicholson and I'm sure you people from Colorado and Montana have seen that and we use it a lot for interdigital fibromas. We cauterize the area after we remove them and many of you in equine practice find no need for these, most people now shudder at the sight of these things, so we put it to good use and we use it in our surgeries. We use a block for a sole abscess in cattle and we secure it with Technovite. You have about 20 to 30 minutes to get it on before it hardens. The champion bull at the Denver Great Western, 4 years ago was sent to us recently. He was purchased at a terrible price and couldn't even mount a cow. We found solar abscesses in both feet. I think that we are reluctant to examine these feet and do a really good job on them because it is tough work and you can get hurt. The reason I preface this whole topic is, if you don't have a foot trimmer, you just can't do the work. I think it enhances the practice economically and it is a good thing to have in your practice. The blocks were left on the front feet for 120 days and the bull serviced 35 cows. He could not serve before. I am in a little Northern area of the County where the weather is inclement and these were put on in winter time. Once in a while I pick up a fungus infection and it is mistaken a lot for foot rot or foul foot, or whatever you prefer to call it. I think we are treating these with antibiotics but don't do them any good. We scrape them off and then we cauterize them with a firing iron. You can do that I'm sure with other hot irons but the firing iron usually heats in 10 or 12 seconds and it just does a beautiful job very quickly.

We believe these things are hereditary. We have done as many as 18 to 20 sires. You might say, "Why do you fool with these and why do you keep the bull?" I don't think that it is our decision because if we refuse to do these and remove them, Bill will go down the road and get somebody else to do them, so we do a combination. I know that in the literature several workers have recommended that the toes be wired together. We do, I imagine, a couple hundred of these a year but we do not wire the toes together. You don't have any trouble if you don't get into the soft, spongy tissue and don't get into them too deeply. I think that you can get along all right with it. You may miss a sole abscess if you don't trim the feet and I think we really miss them, I know I did for years. In our bull breeding soundness program I am involved with the sales and we just cut these out and we are finding that 10 to 15% of these bulls have hind feet that are bad. We watch performances on these bulls and they'll last a couple of years and I think you've just wasted your money. This is another technique. We're using raw nitrogen on that. I have a brymill cryosurgery machine that is enclosed in a liquid system. It works very well. There is no bleeding and the only problem is that you don't know whether you've got the corn or not. I've done approximately 80 of these and checked back on about 50 or them and they healed beautifully with no bleeding, no infection and you can turn them right out into the corral. We had a Shorthorn bull that was purchased in Iowa and he had injured himself on a truck. There was a lesion between the dew claws and the bottom of the foot in the volar region. A tendon was lacerated and the veterinarian at the point of origin did the best he could. We trimmed it off and protected the area with gauze and furacin and the cryosurgery was applied to it. I looked at the bull 3 months ago and the lesion is absolutely gone.

A condition that we see a lot in bulls during bull evalua-