Practice Tips

Dr. Nolan R. Hartwig, *presiding*

A Modified Technique for Vulvar Repair in the Bovine Animal

Stan Held, *D.V.M.*
Buffalo, Minnesota

I picked up a few tips at some of the bovine meetings that have been helpful to me and I hope this may be one that may be helpful for you.

Most of us in Minnesota do a lot of obstetrical work in dairy cattle. I don't know about the rest of you, but we run into some similar problems over and over. One of the things we see is vulvar lacerations, the vulvar anatomical problems that cause a poor closure of the vulva, resulting in pneumovagina of varying degrees. I would say that that doesn't have to be real severe to be a cause of infertility. I feel if there is any pneumo-vagina when you examine a cow, it may be a candidate for a caslick's or vulvar repair.

Often times we forget some of the simplest procedures and kind of put them back on the shelf and don't do them anymore. So I would like to outline a simple procedure that I think is good for the veterinarian, is good for the cow, and is good for the client. I feel that these vulvar repairs are good for the cows in a couple of ways. They do enhance their breeding capacity and they also help some of these so-called wind suckers that are not the thriftiest individuals just from the discomfort they experience. I equate this with some of the experiences with race horses. Most of the mares that run on the tracks are sutured so they won't be windsuckers.

Why was I interested in a modification of the old tried and true vulvar sutures? Mainly, and it may just be my technique, but I think I had more failures than I like to see. The sutures would come out and we didn't get a good repair so I got discouraged with it.

Getting on the farm and examining these cows, we felt that in some of our former repairs the failures were probably due primarily to tension on our sutures and contamination with feces. If I were going to design a cow a little differently I would put the rectum in a different spot so it wouldn't contaminate the vulva, but we're stuck with it so we're going to have to deal with it! I think in general, in all surgery whether it be bovine or equine, or whatever, many times if we put too much tension on our primary skin sutures we're going to lose them. I'm a great believer in tension sutures to take up the tension and that's one of the things we are doing in this particular procedure.

This poor slide that I will apologize for, if you can see to the right of the anus there is a little pool of water, just from the weak ligaments around the rectum, the anus and the vulva. So these are the things we are dealing with. If you just take the tail up a little bit on the cow, the vulva opens right up and she will fill that vagina full of air. So we decided to do a repair on her. The only surgical instruments we need are a cutting needle holder, a thumb forceps, a needle and a pair of scissors, and prolapse pins that have a wooden knob on the end. They are threaded on the end. Also a bottle called seal tight. It is liquid latex rubber sold by Veterinary Concepts, Inc. in Spring Valley, WI. That works very well with a dauber bottle to put over the sutures. For the purists among you I have a pair of rubber gloves and you can do with that as you will. It is a simple procedure to do the epidural and this I am sure is redundant but I like to clip the hair to find the area of the epidural and clean it. I don't count vertebrae but I find the soft spot where I can go in with the needle. We use about 4 ccs 4% procaine. The only suggestion I would make that works well for me is after I put the procaine in on an epidural, someone told me that it helps to put about 2 ccs of air in the epidural space. I think if you will try that, your epidurals will be much more effective and more quickly. When you have the vulva drawn back into that space it is tough to put the prolapse pins in. Get a hold of the vulva with a towel and pull it out so that you can put the prolapse pins through the vulva from one side to the other. Normally this is all that is required. Clip off about 1/4 of the skin on both sides and put the mattress sutures in, using 2 or 3 Vetafit. There is not a lot of tension on these sutures. We have the vulva pulled out of that cavity. We have more of a drop so we're not going to get as much fecal contamination in the area. When I finish with it I take the latex rubber and put a coating over there and let it dry and put about three coats on. It's been my experience it's been there when I come to take the sutures out. It's pretty well protected. I don't use any antibiotic or any powders on the suture line. As of today I have had no failures.

Another suggestion I would make is just to tie the tail off to the side so she can't whip it back and forth and she won't

be rubbing the seal off.

About two weeks later we go back, usually on the next herd check, and remove the sutures. If you leave them in there a month, it doesn't really hurt to leave them in there that long. Normally we don't have any recalls on them. We do need to mention to the client that he probably will need to open that vulva up before the cow calves and he can use a pair of scissors or a razor blade and just open that very easily. We usually check that cow before she is bred the second time around and many of these we have operated on three and four times.

In conclusion, I feel it is an economical procedure that works. It's a procedure that will preserve a cow in the herd for a few more calves. It is something the client can see you're doing and he can appreciate it. I don't know about Iowa, but in Minnesota we are in a financial crunch and our out-of-pocket expense is not extremely great so it is not an expensive procedure to perform.

Question: How long do you leave the prolapse pins in? Answer: I usually ask them to take them out in about a week. If you leave them in too long they will cause some pressure necrosis if you have a lot of pressure on them. In a week's time the other sutures are holding pretty well and they will maintain themselves. But the client can just screw the block off the end of that prolapse pin and throw them away with no problem.

Question: What do you charge? Answer: We normally charge $35 for the surgery, plus the call and the medications that we use plus the prolapse pins. You have maybe $5 out of pocket expenses. You can do the whole procedure in probably 20 minutes.

Question: How long do you leave the sutures in? Answer: We usually leave them in a month so we can pull them out on the next herd check. We like to leave them in until we are sure we have a good closure.

Question: Where do you get the latex rubber? Answer: It is seal tight, formerly a teat dip that is used straight, but now it is used with chlorohexadene in with it. It's a different brand and I think that one would work equally well. This original one has more rubber in it I believe. This one is from Veterinary Concepts, Inc., Spring Valley, WI. I don't know if they have it in those quarts any more. Most of what we have now is in gallon jugs.

Practitioner's Role in the Diagnosis of *Haemophilus somnus*

Phil Geeding, *D.V.M.*
Phillips-Roxane
St. Joseph, Missouri

Many of you have had some questions in the past years about *Haemophilus* and I am sure I have talked with some of you. It seems in the past year or so there have been many questions about the meaning of the titers as any one particular category. So that is what we will key on. Very briefly the category of signs on *Haemophilus* so you can break it down by categories. Respiratory disease, septicemia, and primarily we talk about TEME more than anything else, and reproductive. When we search the literature we can find quite a bit of information on all three of these really. There has been a lot of more recent information on the reproductive aspects and probably that is the one we don't know quite as much about as we do the other forms of *Haemophilus*. As far as diagnosis of *Haemophilus* as well as many other microbial organisms, we utilize the culture technique quite a little bit and it is a very good means. It is an opportunist so you can recover it from even healthy animals. But in cases of pathology, like on a lung or something, if you get a pure heavy culture, it certainly points in the right direction for diagnosis. But as in many other diseases, we try to establish some serological method of diagnosis. We worked on this trying to interpret the meaning of titers. There are some draw backs to, say the specimen diagnosis, sending it to a laboratory, if there are any antibiotics in the animal that tend to really prohibit the growth especially of *Haemophilus*. If you are several hours from the lab, you can get some false negatives. I've tried to make some meaning out of the serological work on *Haemophilus*.

Many of you that have had titers work done may recognize some of these ranges here. We tried to identify some ranges...and I might add before we go into these, we use the micro titers agglutination test. These titers are indicative of that test. 1:32 to 1:128 would be in the range of minor to heavy exposure to *Haemophilus*. We know from taking a susceptible animal and vaccinating that animal we will get a titer of 1:64, 1:128. 1:256 is kind of a break off point above which we strongly consider that animal as being in an active disease state. Current thinking is that perhaps that break off point might be a little closer to 1:512. I really don't have any problem with that at all. Somewhere in that range is the break off point between heavy exposure to the organism and active infection. Some of you may have had titers run for *Haemophilus* in which the complement fixation test was done and what you will end up with is a lot lower titers. They are still meaningful but you can't use these criteria to interpret titers you get from complement fixation. The micro