Practice Methods and Techniques

Dr. Leland C. Allenstein, presiding

Dr. Allenstein: Good evening, ladies and gentlemen of the American Association of Bovine Practitioners. Welcome to one of the most well-attended sessions of the annual conference of the AABP. Well the name this year is not practice tips but practice methods and techniques. It still has a flavor of what you are doing in the country, in practice, and in the field as practitioners. This marks the first general session of our meeting here in Baltimore. During the next three days we hope that you will find or hear or acquire some knowledge to make you a better practitioner, a better citizen, a better member of your family and also a better servant in this nation. There is a story about Homer, 86 years old, and Emma, 84 years old, who had been living together many years and one day Emma got sick. Emma had to go to the doctor. The doctor examined Emma. "Emma, you're pregnant." "No," she says. "Where's the phone." She goes to the phone and dials home. "Homer, this is Emma. Guess what. I'm pregnant." Long silence. "Who'd you say this was?" So like this session, one can see many products, many productive things can come still from age. Our first presentation tonight comes from Dr. George Washington, Purcellville, Virginia, on the use of Prostin F² Alpha in the dairy cow. Dr. Washington ...

The Use of Prostin F² Alpha

George E. Washington, D.V.M.

Good evening ladies and gentlemen. There is one advantage to being first on the program. What I have to say tonight has not already been said. I have been using Prostin F² Alpha in the dairy cow since it first came on the market in February of 1976. For the last year and a half Prostin F² Alpha has been my treatment of choice for pyometra in the dairy cow. I use five vials, 25 mg IM. I would say that I have been getting at least 85-90% success rate with this one treatment, no other treatment. I have a few that I have retreated after this that didn't quite come down to normal that I might have had to infuse or one or two of these I have retreated with prostaglandin with one vial in 10cc of saline in the uterus. I have tried one vial in a regular full blown pyometra in the uterus and it didn't work. I tried it IV and it didn't work. I've also been using it on a few heifers for mismating, both dairy and beef heifers. Most of these heifers would probably weigh between 600-800 pounds. My procedure is to wait and see if the heifer goes past her heat. If she misses heat, I check her for pregnancy at 30-40 days. If pregnant, I am talking about now the heifers that are in the 600-800 pound weight, I give three vials, 15 mg, IM. I have had outstanding success with this. Then I recommend to the farmer if the animal is old enough to breed, to rebreed her at 24 days or approximately 24 days when she would be back in her second heat. I have checked several of these animals pregnant on the first breeding from artificial breeding. Also we have a little bit of dairy goat practice and where they have dairy goats they have a lot of billy goats and they are kind of hard to keep penned! So it also works very well for mismating in the nanny. I use one vial, 5 mg IM, at 7-10 days. I've also at times, where they have had two animals on the same place very close to the same times, used as little as half a vial, 2-1/2 mg, and it has done very well. It's also reported that it works for mummified fetuses. Most of the mummified fetuses that I see in the dairy cow are not worth using it on, but I have had two in which I have used 25 mg and both aborted in about three days but the fetus had to be removed manually from the vagina as you normally do when the cow normally aborts a mummified fetus. I use it a little on sows in heat, one vial in 10cc saline in the uterus. I mark them with yellow pencil on the back, and have the farmer observe for heat and then breed them. I haven't most of these animals, none of my animals I have had them breed with no observed heat. One observation I have made, is that when I used it in the afternoon, the farmer has observed more in heat than he has when I've used it in the morning. Just recently I've started using it for cystic ovaries with luteal activity. To me it looks promising but I have not used it enough to really tell at this time. And in this method I am doing the same thing, one vial, 5 mg in 10cc of saline. This is a very promising drug. I have been in bovine practice for 11 years and I think it is one of the finest drugs I've seen on the market for reproductive work. I hope that some of these methods will be obsolete in a few months when we have it so we can use it for quite a few things.

Use of the Laryngoscope

Larry Hollis, D.V.M

Vega, Texas (presented by Dr. David Bechtol)

I've asked to present this for Dr. Hollis. His practice method technique is on the use of the lighted laryngyscope in diagnosis of the bovine respiratory disease. For those who are not familiar with the larygnyscope this particular product in our area is obtained from Pioneer Veterinary Supply in Houston. But this has a light that you can pass into the oral cavity down into the trachea and we use sovereign equine vaginal swabs and some others. I like the sovereign swabs much better than I do the other ones. Then we use the culturette tube to put the swab in after we collect the sample to keep it moist and get it ready to send to the diagnostic laboratory. We use this particular technique for observing lesions in calf diphtheria, laryngitis, etc. We also use it for examining the esophagus. It is a one-man technique. You can put the culturette tube in your mouth and pass the laryngyscope. If you have glasses, you need to be sure and use the silicon base lens cleaner to prevent fogging. Then if you are looking down the tube and all of a sudden it gets dark you better get out of the way because the animal is regurgitating and you can sure have some problems! It is better than a nasal swab culture because you can get right into where the meat of the problem is and you have less contamination. You extend the swab down into the larynx or trachea and then you withdraw the swab and put into the culturette tube and you have a good sample that you can take to the diagnostic laboratory. This works well for us and we thought you might be interested in it.

SPECIAL NOTE: a) If you wear glasses, use silicone-based lens cleaner to prevent fogging; b) If tube suddenly goes dark-watch out, animal is regurgitating.

SOURCES: Laryngoscope available from Pioneer Vet Supply, Houston, Texas. Swabs, HL 2064-00 available from any Haver-Lockhart distributor. Sterile culture swabs by Sovereign available from any veterinary supplier. Culturette by Marion Scientific and available from Scientific Products, Jen-Sal.

Monitoring A.I. Performance in Large Dairy Herds

Steve Smalley, D.V.M

Chandler, Arizona

My talk is on the systems that we're using to monitor heat detection in our AI herds. It is entitled "record systems to monitor performance in AI herds." The first thing we use is a 24-day trial. This consists of a list of all cows that are fresh long enough to breed as of the first day of the trial that have not been bred. 90% of these cows should be caught in heat before 24 days. This is a goal that we set. We set up this trial once a month and another little quirk that we put in is 30% of these cows should be caught in heat every 8 days of this trial so the herdsman or the owner can monitor his herdsmen to see how well he is doing a pretty good job. I am finding that usually for the first 8 days they are pretty close to 40 or 50% and it is the last 8 days that is a problem. I set up a 24-day trial on one of my dairies in the summertime. On the first 8 days, he hit 14 which

was the goal figure, the second 8 days he hit 27 which was one short of the goal figure so he's doing a pretty good job and then we started into July. In Arizona it is 110-115 degrees and it gets a little hard to catch cows in heat so he didn't do as well. In another 24 day trial in the fall, we used a dairy breed at 30 days and I set up their goal figures 12 days, 24 and 36. Twelve cows, 24 and 36. This fellow caught all the cows on this trial in 24 days. This sets an example for my other clients that this can be done. The second heat detection monitor that I use is post-service heat detection monitor and all cows that are presented for pregnancy, we checked 30-60 days once a month. We examine for pregnancy. 85% of these cows should be pregnant. I figured that approximately 15% of the cows would have an early embryonic death and would not return to service in 18-24 days. Just to show you that it can't be done. I used it on five of our herds in the month of July which again is a difficult month for heat detection. And I use it as a competitive stimulus to people so they can try to be at the top of the list. One person did hit 85%. The third thing that we do is calculate first service conception by month, by technician and by bull. This way there is competition between technicians and dairies. By calculating it by month we can eliminate the environmental factors, in other words, it's hotter in the summer so the conception is going to be a little lower and so we have a better comparison on how the first service conception actually is. A record system so that we can get this information consists of a system where we list the cows in consecutive order of freshening and then we have a column in this particular dairy which also included the heats before breeding and then we indicate the date of the first service and the bull. One dairy had only one technician doing the breeding but otherwise that would indicate the technician. So if I wanted to set up a 24 day trial I can use this chart, go back whatever number of days he is starting to breed. Most of my dairies are starting to breed at 45 days, so I go back 45 days, list all the cows that have not been bred yet and put them on the trial to figure first service conception. I figure all the cows that are bred in whatever month I want to do the conception on and I indicate which cows are pregnant after the pregnancy exam and get first service conception pretty easily. Another system that I use is the card file system with the tabs on the month of freshening and a tab on the month of first service conception that is not moved when they are bred second or third service. I can go down through these tabs on that month and find out what the first service conception is for that month. We also have DHIA records that give us days open to breeding, total days open and calving interval. These are good monitors except that they are not as quick as these other monitors because there is a little lag time. The calving interval indicates what you did last year and days open indicates what you are doing right now. For about 18 months I've been keeping records on how my herds have been doing. I give each herd an individual number so that when I show this card to people they can't say that "Well, Joe Blow did that bad," they just can see how well some people are doing and it motivates people when they can see that somebody can do a good job. If they see somebody that can hit 90%, they want to hit 90%. We now have a two-man practice so I've set up a system so that we can communicate between the two of us. We both work for all the clients and this doesn't get shown to the clients, it just communicates between the two of us. We have also added the number of cystic cows and the number of abortions which are other factors for which we want to get some data. The 24-day trial results for the month of October on five of our herds, just selected at random, showed how well people can do. The top one was 97% and that is really excellent. We started work on another herd in June. They did not use a veterinarian to do their pregnancy exams before we started doing their work. Their pregnancy check was 72% on their first exam and it worked up to 88% in October. The last two exams last November and December were 91%. So I think this system helped to motivate them to do a better job.

Spaying Technique

Richard L. Johnson, D. V.M.

Torrington, Wyoming

A new heifer spaying technique is a kind of a misnomer. It was

introduced to me by Doctors Gates and Kline in Lewistown, Montana, about 10 years ago.

This procedure is aimed at two basic things, one is a rapid recovery from surgery so as to lose as few days of gain as possible plus acquiring some degree of speed so that you can get through 200 heifers in a day without traumatizing the heifer any more than you have to. There are other procedures, one is the older cowboy type that is still being done in Wyoming and with success, that's heading and heeling the heifer, often times just heeling the heifer and then wrestling her like you would a baby calf at branding time. It is fast and efficient. I think this is possibly a cleaner technique and less traumatic on the heifer. The other is a new technique which I must admit I haven't tried and that is with the new spaying instrument that was developed at Colorado where you go through the vaginal wall with the instrument to remove the ovaries. To accomplish the things necessary we use two in-line chutes. We prefer at least in the lead chute, the front chute, a stanchion type head catch. The other chute should be a squeeze chute with a front delivery. The other thing, probably the most valuable thing, is to use one employee of your own to run the chute that you are going to be doing the surgery in. This fellow can increase the speed plus keep your surgical technique very good. A good working set of corrals is essential and both you and your helper need practice which you only get by doing it. Now in the first chute, the heifer is trapped. In the chute behind the lead chute, we clip an area in the paralumbar fossa. We use a sheep head on a pair of Sunbeam clippers. The clippers seem to last longer and they stay sharper with the sheep shears than with the regular type clipper. Also in this chute the heifer is washed with Novalsan solution and with a point being made to get the entire area wet plus the hair that is not clipped around the clipped area, you want it wet too, so that as she flies up into the front chute (and they are wild sometimes) she is not scattering hair any farther than she absolutely has to. Also we give an injection of penicillin. We started using paper towels with Novalsan solution to wash these heifers. We have now gone to various assortments of cloth rags in the bucket. It seems to work a little better. The fellow in the lead chute is ready to catch her and he is an ambidextrous fellow, and has one leg up in the chute. He actually has just got his foot up in a hole where he has left the bars down so she does not jump out. He is able to facilitate and speed the procedure. A bar that is behind the heifer holds her up as far anteriorly up into the chute as possible and that stops this motion which is important. The incision is made and we hand a curved pair of scissors with handles approximately 14 inches long to our assistant as we make our incision. He holds nothing but the handles with this hand which never reaches inside the heifer. We go in through the skin and fascia and sometimes the sheath of the external abdominal oblique with the knife and that is as deep as we go with the knife. From there on it is a simple incision, kind of a stab method, with your hand and after a season your hand gets rather tough. Once we reach the inside of the abdomen through the peritoneum, the assistant releases the squeeze, enough to take some pressure off the abdomen. As we pick up the near ovary which in this case would be the left ovary, we slide the scissors through the incision along our wrist and we apply a little bit of pressure right along the edge of the incision and this allows some air to escape into the abdomen breaking somewhat of a vaccuum and it's almost dramatic on these heifers that you have starved well. The intestines will just drop right out of your way, and so all you have left is the uterus and the ovary and the rectum. So there is very little confusion once you've felt an ovary. There is nothing else quite like it and so you've got a hold of the near ovary, you cut it off, keep it in your hand, reach under the rectum, pick up the other ovary, which would be the far ovary, the right ovary, draw it to you somewhat and cut it off and then you've got both ovaries in your hand and you come on out with them. You don't particularly need sharp scissors. I like them kind of dull. You get kind of a rip tear method out of it but it is also kind of an emasculation technique where you don't have to worry about any hemorrhage from the stumps. The assistant squirts some antibiotic powder into the incision and we're ready to suture. I use linen most of the time that we get from the local shoemaker and it is inexpensive, and it is relatively easy to use once you get used to it and you can leave it in there and this fall when those heifers come through