

hexadine or something along that line. I use a five-gallon bucket with disinfectant to drop my instrument into and all we need now is the heifer and an assistant. I find it very advantageous in my practice where most of my herds run from 50 to 250 range cows and some of these owners decide to keep 6 heifers or 50 heifers or whatever the case may be. The reason is it is less traumatic for the heifer, there's no bawling, very little jumping, they don't see any blood and that's a real client pleaser. Post-spaying complications are none, unless you cut a gut! Speed—I find it extremely fast, I didn't have anybody show me how to do this. I just wrote to Dr. Kinley and started in. If you can't do one in 15 seconds you're not doing well. It really goes fast. Probably the biggest thing is client acceptance of it. All you do is get the heifer in wherever you're going to put her. Put in one arm rectally. I use my right arm, and it goes into the rectum, I have an assistant with a back-pack sprayer standing there—gives a good blast on the peroneum, knocks the dirt off. I pick up the instrument from the bucket, with the other hand into the vagina, up over the top of the cervix, into the fornix, and at this point you can see that the spring loads and the trocar comes out at the end. We've got the trocar at the end and your hand in the rectum. Everything's up, out of the way, you give it a push, and you are through into the peritoneal cavity. You drop the trocar, and there you are. Your next thing is to isolate an ovary, whichever one you start with. I start with the left one, reach over pick it up, making sure I have it free from the intestine. That is probably the most important thing. Get it over the hole which is closed, and then open it up. I use my left hand. You can do it all with one hand very easily. You've got the chamber open, and the left ovary in there. Turn it on around to the right and cut it. Before you can completely close your chamber, it is best to move your instrument back and forward a bit to be sure you don't have the rectal wall. It is very simple to tell. Close her off. The spring pushes the ovary up into the holding chamber and you are all set to do the other one. Just the reverse treatment. Close it off, pull it out, discard the ovaries, drop the instrument into the bucket and off you go. It is an extremely simple, very fast technique which is pleasing to the clients.

Question: What do you give the heifer post-operatively?

Answer: Nothing.

Question: How many did you kill?

Answer: I killed two when I started. Cut out a piece of intestine—that sure does it!

Question: What do you do about hemorrhage?

Answer: I have never had a problem with hemorrhage, even when you have a big CL. In that case you do have one problem—it won't fit into the cutting chamber and you have to make two to three cuts, but it is just a matter of cutting a piece off, dropping the next piece in and cutting it off.

Question: What does the instrument cost?

Answer: The instrument cost is about \$250 (Lane Manufacturing).

Cattle Handling Equipment:

Dr. Jim Lewis, St. Paul, Nebraska

St. Paul, Nebraska is 20 miles north of Grand Island

and we have a 3 man practice—Dr. Lyle Raffison, Dr. Any Martinson and myself. Our building is 60 feet by 100 feet with the front half for small animals and the back part for our trucks, pens and what work we want to do inside. We put in a small chute for pickups and horse trailers because we find that one pickup can mess up a lot of pots when they show up. We moved out to the edge of town and built a new clinic so we incorporated a Bowman half-circle with the Powder River runway. We have a Trojan chute which is commercially made in Weatherford, Oklahoma, and it is beautiful. It has a three horse motor and it just does not quit. We process a lot of incoming cattle. We keep a few of the branding irons hanging there. As far as I know, there's no portable hydraulic chute that you can go to the country with, that will work! The only one I know of is one made by a place called Mighty Handy and my estimation of them is they're mighty unhandy! But after we obtained that Trojan, we didn't have anybody that wanted to go implant big steers anymore or preg-check cows. So we've got a young hungry blacksmith and he knows what he is doing and he did this for us. It's Powder River head catch, front and rear, with a horse and a half electric motor on it. Runs on 110. You've got front control, squeeze control and the back control and it does work and you can handle a tremendous amount of cattle. The only time we have any difficulties is when they are fat and black and short and squatty, and that board you see lying along the side is a board that we just place behind so that they can get their belly up high enough to walk in, but, with the advent of Chianias and other big cattle, we don't have to use it too often. It added quite a little weight to it. We have always run fenders so we just had a cable put on the fender that goes down at the front of the chute and you just stand there and turn the crank and it picks itself right up in the air. It can be set up in a feed lot and you can run just as fast as you can with any of the commercial jobs. Also, we don't have an arm and a leg in it. We have the basic chute and we have about \$1800 on top of it in the rest of the equipment. We have them all rigged to where we can tie to the back end of them and we can also adjust for smaller cattle. I don't think there's anything more disgusting than to get ready for one and he's turned around. We try to keep them squeezed in pretty tight. They are just old standard WW that we have rods on. They are simple to make, don't cost anything but they sure save you a lot of work. We carry 2 six-foot panels inside the chute, just to hook up to their equipment, the barn doors, they'll hook anyplace, they'll set anyplace it just gives you a means that if you are in a mud hole you can get out of it.

Our original foot trimming table was very nice and it did a good job for us. But as bulls got bigger, and meaner, it was a wrestling match getting them on there. At the meeting in Toronto last year there was a hydraulic tilt table but I was never able to find out where it came from, but it looked like it would work and it was simple. So we scrounged up an old chute that was not any good but it was big and tall and awkward and we had a blacksmith put it together for us with Powder River head catch and fixed it so that it could dump over and it has cut our wrestling time down. Now we have some energy left to work on them, especially foot trimming, and it has done a beautiful job for us.

We have been using our electric dehorners to trim old long toes and snip them right down. And those things are hard and tough. We use a power air jet dehorner which runs on a CO₂ bottle or a propane bottle. They do a beautiful

job. We use a grinder with a #10 grip, which you can use for a couple of hours and you are not worn out. These were designed as a disc to grind tractor tires with for a tractor pull and a guy showed up at our clinic with his own grinder and discs and we talked him out of them and then we went ahead and ordered some. They are made by an outfit called Tunco, but when you use these things, they just shred those feet off like coconut. It takes a lot of the work out of it because you can get a good eighth of an inch every time you make a pass with the buffer.

Question: Does that get very hot?

Answer: No, there's no heat buildup with this. You have to buy their back pad. It is a heavier rubber pad because this is steel and it is flexible and it will back it up. It is good for about 30 cows.

Question: Where did you order those?

Answer: It's Tunco Manufacturing, P. O. Box 408, Geneva, Illinois, 60134.

This is a 18046 7-inch #10 grip.

Emergency Teat Surgery:

Dr. Dwight Bruno, Franklin, New York.

I am in a dairy practice about 100 miles west of Albany, NY. My talk could more appropriately be termed just Teat Surgery. One of the biggest problems that I had when I started practice was having teat lacerations heal correctly. We tried everything from vetafil to some of the synthetic absorbable suture, catgut, but never had much luck. Finally, we decided to keep the suture as simple as possible with one layer closure, using a 00 to 000 nylon. I simply use a splitting muscular, simple interrupted pattern enclosing the laceration. I found that the more suture material you put in the surgery the more trouble you have. I don't know if this was from tissue reaction or increased chance of infection. The other problem that we had was having the farmer get the milk out of the quarter without interrupting the suture line. We figured one way that we could do this was to take an 8-french urinary catheter with an inflatable cuff on the end and place it up through the canal just below the gland cistern and inflate it and then the farmer could simply untape the end of the catheter and allow the milk to drain out. He wouldn't have to be sticking milk tubes up into the teat and infecting the quarter and having problems develop that way. We had a much better healing process going on. The catheter has to be left intact as it is put in. You can't cut the end of it because the inflatable bulb at the end of the catheter will come loose and the whole thing will come out. For a teat that has been cut 5 days previously I freshened the edges and placed the catheter into the teat, just below the gland cistern, with alligator forceps. You can feel the end of the instrument and you can place it very nicely. I used 000 nylon here, again very non-reactive. It has good strength and it holds very nicely. You can see the end of the catheter and there's a little spout off the side that you put your syringe on (about a 3 cc syringe for this size catheter.) Push air into it and again the bulb at the end of the catheter inflates and

holds it right in place. I usually coat the catheter with Beta-dyne ointment to help ensure that I am going to minimize infection and after I place my suture line in I paint it over with flexible collodion which helps keep it dry and, again, aid in healing. If the cow lies down on a wet bed she is not going to contaminate it with urine or manure and have it dehisce. Unfortunately, one owner decided that the catheter was too long and he decided he had to cut the end off so the whole thing blew apart! But if they don't do that they heal very nicely. You have to go through these rules with the client because it is very easy to get disgusted with the length of the catheter and have them cut it or start tugging on it. Once it is pulled out, it is very difficult to replace and you just end up with an infection. I have had much success and I'm very happy with it. Again, I leave the catheter in about a week, have them treat it every day, and then after I pull out the catheter, I have them hand milk it for a few days and remove the sutures at about day 10.

Question: Do you suture deep?

Answer: No, I don't. I like to split the muscular layer. I found if I went too deep, I had infection, and of course then you could not put the catheter up through if you had suture material into the duct itself.

Question: Where do you put the alligator forceps to place the catheter?

Answer: I go into the end of the teat, right up through the end of the teat and just below the gland cistern; so the tip of the catheter is exposed to the entrance of milk in the top of the teat.

Question: Have you had trouble with the sphincter closing to its normal tone after removal of the catheter?

Answer: No, I have not.

Question: What do you do if mastitis sets in?

Answer: If mastitis develops, I just treat it as I would any other mastitis, leaving the catheter in place, and hoping that we can clear up the infection.

Question: Doesn't the catheter plug up?

Answer: Yes, that is a problem, if you get a real chunky mastitis you just have to work with it the best you can. I did have one case where we did get a really cheesy, chunky mastitis, and we had to pull the catheter and just try to work it out by hand. That is a problem.

Question: What is the source of flexible collodion?

Answer: We go to the local drug store and just ask the pharmacist to make it up. I don't know what is in it. It smells like ether.

Question: How much air do you introduce?

Answer: Usually about 3 or 4 ccs. I've often wondered if I inflated it too much whether I would get some necrosis of the area around where the balloon inflates or not.

Question: Have you ever tried the 4M Teat Shield in place of collodion?

Answer: No, I would suspect that it would not stay around as long, it would tend to wash off a lot more easily than collodion which dries just like plastic. It's really thick and works very nicely.