dehydrated and malnourished I will administer a liter of Life Guard solution at this time and instruct the owner to repeat this at 6 hour intervals until nursing resumes. Milk would be even better, but it is generally in short supply on beef ranches.

In addition to felt-like hair balls which closely approximate a horse dropping in size and shape, hard cheese curds, looser accumulations of hair and plant material, mud and sand, and varying amounts of sour fluid will be found. These cheese curds have the consistency of snow tires and often have been in the stomach for 24 hours according to histories on nursing. Mud ingestion is variable, but hair is a consistent finding. In one case a rope of hair approximately 8" in length and an inch and a quarter or larger in diameter was removed from a contracted abomasum.

Recovery is usually remarkable. Within 18 to 24 hours most calves will be back nursing. Frequently the third dose of antibiotic is never administered because the rancher is unable to catch the calf conveniently. On true hairball cases the surgical success rate should be 95% complete recovery. Unfortunately, you will perform surgery on calves that should have been euthanized such as ulcer/peritonitis calves or prostrate, hypothermic calves occasionally and your overall success rate will more likely be around 80%.

Preventions: Basic herd health measures for cows and heifers including vaccinations for IBR, BVD, and clostridial diseases is recommended. Good nutrition, with adequate mineral supplementation will result in stronger calves and a lessened tendancy toward pica.

The single most important preventive measure has been the use of Dursban for the control of lice. This product has proven itself to be far superior to other back pours and dips, and we have had virtually no complications with its use. Unfortunately it has eliminated a dozen or more of these surgeries annually!

Teat Surgery — A New Approach

Dr. K. Lloyd,
Bowerston, Ohio 44695

During my years of practice i have made some observations and developed a procedure for handling those "stepped on teats" that routinely occur in most dairy operations and too often end up with the loss of a quarter or slaughter of a good cow.

The procedure I will describe is not generally printed in the literature but it has served me well for 35 years.

First, let me define the type of injury I am talking about. It has a sudden onset due to traumatic injury. It involves the distal end of the teat. There is usually some sign of injury, swelling, a little blood protruding from the teat end and usually no milk can be forced out.

Careful observation of the teat will reveal that the sphincter muscle has been torn loose from the skin opening and has receded upward leaving a severely bruised and torn area filled with a blood clot under the skin and surrounding subcutaneous tissue. By using a blunt instrument you can easily probe this area and determine its extent and how far up the sphincter has receded. The surgical procedure which I use is as follows.

First evaluate the disposition of the cow and administer necessary tranquilizers, (usually about 0.5 ml Rompun) secure the head with nose tongs or halter. Then infiltrate the teat end with 2 to 4 cc of a local anesthetic - usually I insert the needle through the opening of the teat and infiltrate into the subcutaneous tissue. There is less pain than entering the outer skin and less response from the cow.

I then insert one side of a blunt Mayo scissors through the teat opening and probe the cavity to determine how far it extends up the teat. Without removing the scissors blade I cut upward the extent of the cavity and then follow this around the teat removing the end - sometimes this may be nearly an inch. With the end removed I then debride the area - remove the blood clot and look for that bright white tissue which indicates the opening of the spincter muscle. At this point usually the milk can be easily forced from the teat.

The most important thing I can say about this procedure is that the sphincter muscle is almost *never* injured. Now this is not what most veterinarians have been told or believe, but I have used this procedure on several thousand cases and never is the sphincter muscle damaged.

The injury always is confined to the rupture of the sphincter from its skin aperture and *bruising* of the subcutaneous tissue around it. I must admit I have seen cases where the teat canal was ruptured above the sphincter, but the sphincter was intact. In these cases I recommended draining the teat with a tube and removing the scar tissue after the injury was healed.

After removing the teat end, as described, the after care consists of applying a suitable ointment (preferably sulfa and urea) to a 6½" round *gauze* milk filter pad and using this as a bandage. The bandage should be changed each milking. This is most important in the healing process, usually after 5 or 6 days the teat can be milked with the machine with no further problems and you will have almost 100% recovery without infection. Healing usually requires about 4 weeks.

Tidbits From Tennessee

Dr. Hugh McCampbell
Sweetwater, Tennessee

Good evening. Like everybody else, I want to welcome you all to Tennessee, and hope that your stay here will be such that you will want to come back real often.

I didn't choose the title "Tidbits from Tennessee" for my presentation, but when they asked me if that would be all right, I said that would be just fine, because I figured that after you all hear it, you won't think it should have any more high falluting title than that anyway.

I've gotten a lot out of these sessions in the past, so in turn, I hope that I'll present something that you will feel is worthwhile to take home and use also.

Sweetwater, Tennessee is in the southeastern part of the state. Our country is about half mountains, but there is still enough farmland there for 7000 dairy cows, and we sold 92 million pounds of milk in 1981. The 4 or 5 surrounding counties that we go into have the same sort of agriculture, so dairying is the main agricultural enterprise. We like to feel we are a little Wisconsin, little New York, or little California, as far as the dairy industry goes. At least those are the standards of excellence we like to strive for. Our mixed practice is 80% large animal, and the majority of that is dairy