## Report on Feeder Calf Preconditioning in Iowa

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The term "preconditioning" has been a much maligned term that could mean anything from a special feed promoted by a feed company to a procedure of putting together a pen of cattle at a sale barn, vaccinating them against "everything" and selling them immediately as preconditioned. The theory behind preconditioning as we think of it is to eliminate as many of the conditions as practical that cause a stress to the feeder calf at the time it is moved from the cow to the feedlot.

In Iowa, we have a large number of small to medium-sized beef herds. The calves are usually weaned and sold at sale barns the same day. The feeder will probably put together several groups of these calves to fill his lot, thereby compounding the possibility of stress and disease problems.

Our basic program is no different from any other preconditioning program. We ask that the calf be four months old and that all immunization procedures, surgical procedures, grub and lice control, and weaning be accomplished at least three weeks before being offered for sale. The calf is ear-tagged with a special green tag. The tag number and all the information about the above procedures are entered on a certificate given to the purchaser. The unique aspect of the program is the organization and administration. This program was started in the South Central Iowa Veterinary Medical Association by a group of veterinarians in a predominantly cow-calf area. By 1969 enough interest had been stimulated that the program was tried on a state-wide basis.

The bovine Practitioners' Committee, a subcommittee of the Iowa Veterinary Medical Association, now has the responsibility of administrating the program. All materials such as certificates and ear tags are handled through the office of the IVMA. The committee promotes the program and periodically reviews it for possible changes. Acceptance of the program was slow at first, but eventually interest spread when several sale barns began holding sales for preconditioned cattle only.

The program really began to gain momentum the last two years, due mainly to liaison between the Bovine Practitioners' Committee and the Iowa Cattlemen's Association. The ICA became very enthusiastic over the possibilities of the program and began organizing local preconditioned sales at county levels.

The measure of success or failure in a program such as this depends entirely on whether or not the cattleman gets paid for his extra effort. Last year at sales sponsored by the ICA, the price averaged from two to three dollars per hundred weight higher than the calves at non-preconditioned sales. So far, the trend is continuing this year. At the time of this presentation, the ICA has thirty preconditioned feeder calf sales scheduled; in addition, a number of private sales are being held.

In 1969, the first year of the state-wide program, 61,000 calves were preconditioned. In 1974, 130,000 calves were processed and this year on December 1 the total was 150,000.

We believe that weaning is a very important part, if not the most important part of the preconditioning program. In the early years of the program, feeder acceptance was not strong on weaned calves so that weaning was not mandatory, but encouraged. Many farmers did not have facilities or the knowhow to wean calves. As the program gained momentum, so has the procedure of weaning. The extension service at Iowa State University has provided many educational programs over the state relative to the weaning procedure.

At the present time, most ICA-sponsored sales require mandatory weaning. Our committee's goal is universal mandatory weaning in the coming year.

The feeder calf preconditioning program in Iowa is a cooperative effort among a number of groups-veterinarians, cattlemen, sale barn operators and extension service personnel. This cooperation has most certainly been the key to the program's acceptance and continued growth.

> Evaluation of the Intravenous Administration of Xylazine Hydrochloride (Rompun) on Cardiopulmonary Function in the Bovine Species

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Xylazine hydrochloride is a sedative, analgesic and muscle relaxant.

Twelve cows were administered xylazine hydrochloride intravenously at a dosage rate of .1 mg per pound of body weight. Teflon catheters had been implanted into the saphenous artery and vein.

Blood gas determinations included  $PaO_2$ ,  $PaCO_2$ ,  $PvO_2$ ,  $PvCO_2$ , and blood pH. The  $PaO_2$  and  $PvO_2$  were sharply decreased and the  $PaCO_2$  and  $PvCO_2$  increased. However, the results approached normal values at the recovery period. The changes were acute and clinical signs of hypoxia were not present. Blood pH was not significantly affected by xylazine hydrochloride.

The ECG records showed an increase in Q-T interval and decrease in the cardiac rate. Systolic and diastolic blood pressure were significantly decreased. The absence of apparent clinical alterations seemed to give support to the affirmation that healthy animals generally tolerate the changes caused by the administration of the drug.

Question: Do you know whether the European dosages were nearer the full dosage or were they the

low dosage of 1-2 tenths of a cc that we use for many cases.

Answer: European dosages are extremely variable, ranging from .025 mg/lb. to as much as 3, 2.5 mg/lb. either I.V. or I.M., but those dosages are various actions, whether you want recumbency or whether you want just sedation. With the results we've shown here, our maximum dose is pretty much in the ballpark.

Question: Do you know where the abortion rates start?

Answer: It has nothing to do with dosage as much as the point in pregnancy.

# **Practice Tip**

**Robert Scott,** D.V.M. Brighton, Colorado

Everyone stand up. The mind can't absorb any more than the seat can withstand and you can listen while standing up. We are going to talk about people for about three minutes, and I am going to change vour income. You see, I never had a cow write me a check and the Creator gave you a marvelous and wonderful example of how you should use the instruments on your head when you get out of that car in the farmer's yard. You have two eyes and two ears and nostrils and one mouth and that's the proportion in which you should use your mouth when you are standing in front of that farmer. Secondly, I have six honest serving men. They taught me all I know. Their names are what, where, when, how, why, and who. I can promise you that these six serving men can make you a whole lot smarter because your clients will teach you more than you'll ever learn in college. Not that I want to berate the college at all, but the man who is people-oriented has more fun out of life and he has a more rewarding practice.

Someone else covered what I was going to talk about, so I thought we'd talk about something else and give you a stretch. Thank you.

#### **Urethral Calculi Surgery**

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In our range practice, when doing urethral calculi operations on steer calves up to yearlings, we have found that using a very small, half-curved, atraumatic needle with 4-0 silk suture has been the most successful.

Using cutting needles has given us leaks and makes it very difficult to make a small stitch without cutting out the wall of the urethra.

When using catgut in the past for suturing, we had a number of operations that the urethra scarred closed from the reaction to the catgut.

Since going to the use of silk about four years ago, we have not had any scarring problems.

The sutures are put in place by going down through the wall of the urethra, bringing the needle out the top edge of the mucosal lining, and then entering the opposite side of the incision at the top edge of the mucosa and coming up through the wall of the urethra. A simple continuous suture is used to close the incision in the urethra with a second layer of simple continuous sutures used to close the fascia.

### Use of a Tape Recorder in a Large Animal Practice

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A tape recorder has several uses in our practice on a daily basis:

1. Record calls right after they are made. Information is fresh in your mind and it saves time-no writing before or while you are driving.

2. Sudden ideas you have about something while driving can be recorded.

3. Can dictate letters between calls.

4. Can turn cassette over to secretary for office recording of calls, medicine used, etc.

5. Very useful at meetings on continuing education sessions and information can be brought back for associates or partners to hear.

Type of tape recorder required:

1. Pocket-sized or at least small and compact.

2. It should conveniently fit into glove compartment of truck or car and microphone can hang on dashboard.

3. Acceptable recorders available: a. Popular Science, Nov. 1975 issue, and b. Craig, Sony, Superscope and Wollensak, to name a few, have good recorders, moderately priced between 50 and 150 dollars.

Give it a try-you'll like it.

### A Technique for Sampling the Bovine Respiratory Tract

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Respiratory disease is one of the most commonly encountered disease processes of the bovine animal. Accurate diagnosis of lower respiratory disease is extremely difficult. Successful treatment is oftentimes completely dependent upon selection of the proper antimicrobial agent and/or supportive therapy. Early accurate diagnosis and instigation of proper therapy can reverse many cases of respiratory disease which, when treated with whatever may "work" at the time, would result in great economic losses.

In human medicine several methods of obtaining specimens from the lower respiratory tract have been used. The transtracheal aspiration technique is currently considered the safest and the one that gives