

Report on Feeder Calf Preconditioning in Iowa

Harvey L. Arands, D.V.M.
Indianola, Iowa 50125

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 administering 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

A. P. F. da Silva, D.V.M.
L. L. Jackson, D.V.M., M.S.
Ames, Iowa 50010

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 PaO₂, PaCO₂, PvO₂, PvCO₂, and blood pH. The PaO₂ and PvO₂ were sharply decreased and the PaCO₂ and PvCO₂ 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