

Management Specialist, Alberta Agriculture, Edmonton, Alberta. This program was developed to take a systematic and integrated approach to identifying opportunities for profit in commercial cow-calf herds. It also helps investigating production, marketing and financial alternatives and consists of five modules: Records, Troubleshooting, Cow Lifetime Productivity, Herd Nutrition (Cowbytes) and Adding Value to the Calf.

This program works well for smaller herds, but for producers with larger herds it is not attractive. Also purebred operations need more intensive guidance and subsequently we developed the following program:

Large Herd > 300 cows or Purebred Operation

1. CONSULTATION SERVICES
  - VETERINARIAN AND NUTRITIONIST
  - STRATEGICALLY PLANNED FARM VISITS
  - ADVICE ON DISEASE PREVENTION AND TREATMENTS
  - ADVICE ON MANAGEMENT
  - AUTOPSY ALL DEAD ANIMALS
  - MONTHLY FEE
2. OTHER PROFESSIONAL SERVICES
  - BULL BREEDING SOUNDNESS EXAMINATION
  - PALPATION FOR CYCLICITY AND PREGNANCY
  - CHARGE PER ANIMAL

### 3. VETERINARY SUPPLIES

COST + 5% (OR LESS) HANDLING FEE

### 4. INDIVIDUAL ANIMAL CARE AND EMERGENCIES REGULAR SERVICE CHARGE

In cooperation with our legal advisors we developed a written contract that is signed by both parties at the start of the program. We also found that offering monthly payments helps sell programs like these.

Currently we have 12 producers with approximately 3000 cows participating in our Herd Management Programs. Growth in this area has been slow, but we feel that by showing that these programs are desirable and economically justifiable, many more producers will participate in the years to come.

### References

Radostits, O.M., Leslie, K.E., Fetrow, J.: Herd Health, Food Animal Production Medicine, Second Edition, W.B. Saunders Company, 1994. Cowchip\$, A Beef Herd Management Program; Alberta Agriculture, Food and Rural Development, Home Study Program, 2nd Floor, J.G. O'Donoghue Building, 7000 - 113 Street, Edmonton, Alberta, T6H 5T6.

## Bovilene-Fenprostolene for Treatment of Retained Placenta-Metritis Complex in Early Postpartum Cows

**Don L. Gardner, DVM**  
Rt 2, Box 196  
Huddleston, VA 24104

For many years veterinarians have searched for an effective way to treat retained placentas and postpartum metritis. Many remedies have been used and many have gone by the wayside. In the 70's the prevailing approach was the volume uterine treatment (VUT) infusion of various formulations. It replaced the insertion of boluses in the uterus approach used prior to VUT. In the 1980's most practitioners finally settled on tetracycline in the uterus as the drug of choice after Olsen's work that was presented at the Oklahoma City AABP in 1983.

In the 1990's drug residue avoidance mania rose to such a crescendo that veterinarians and livestock producers were scrambling for treatment regimens that

did not require long drug withdrawal times and yet were still safe and effective.

After reviewing information presented at a dairy reproduction seminar at the '92 AABP meeting and talking to several other veterinarians there, I ceased routine use of oxytet in the treatment of retained placenta-metritis in October 1992. Oxytet was replaced with a 2 injection series of Bovilene (fenprostolene) at 14 day intervals started as soon as retained placenta or metritis was noticed. Antibiotic use was limited to those cows that were off-feed, looked bad, and were running a fever. In those cases systemic antibiotics and/or intra-uterine oxytetracycline, and supportive therapy were recommended. Foul smelling discharge was not in itself

sufficient grounds to initiate antibiotic treatment.

Results were so gratifying in the 3 trial herds in which this regime was initiated that within 2 months all herds I serviced were switched to the 2 shot Bovilene routine.

One of the early problems that was encountered was a number of prostaglandin injection site abscesses and granulomas that were objectionable to the owner. Reports of cows dying from clostridial infections at injection sites in the literature was a concern also. Phone conversations with technical personnel at Syntex suggested that the addition of 1cc (100 mg) oxytetracycline injectable per 10 dose (20 ml) vial of Bovilene should alleviate the problem. It has completely solved the problem of injection site infections and causes no residues in the milk. I would hope Syntex would take care of this on their own and save us from having to add the oxytet preservative when it comes in to our office.

It might be asked why go to the trouble of fooling around with Bovilene when Estrumate and Lutalyse are available and require no alteration. The answer is that I had tried both earlier for retained placenta/metritis and the results in my hands were not as good. Dr. Jeff Stevenson's presentation on Thursday here at the National Reproduction Symposium seems to support my clinical impression. I feel prolonged action of the prostaglandin that the reposital base provides extends the action on the uterus enough that it makes the extra trouble more than worthwhile. I also feel when using Bovilene the second follow up injection 2 weeks after the first one is necessary to have the high degree of satisfactory results we enjoyed. In nearly 90% of the cows that still had fluid in the uterus at 30 day check, the owner had forgotten to give the second follow up injection of Bovilene 2 weeks after the first one.

It is my clinical impression that treatment early with Bovilene causes an increased tone of the uterus that causes membranes, mucous, blood and pus to drain out instead of pooling in the uterus and undergoing a putrefactive fermentation. In my experience it is unusual in Bovilene treated cows to find a postpartum uterus distended with gas like I used to find frequently. Conversations with physiologists have suggested that this is accomplished due to two factors. One, an increased blood flow through uterine circulation and secondly, by an increased contractibility of the uterine musculatures. This action does not require the presence of a corpus luteum to occur and the cervical lumen has still to be open for good drainage to occur. I have had poor results evacuating a pus-filled uterus with prostaglandin after the cervix has closed and there is no corpus luteum present on the ovary. This occurs typically in cows fresh 30 days or more and requires the use of estradiol to dilate the cervix and evacuate the uterus if you do not want to go through the laborious job of flushing the cow

like you would when embryo transfers are done.

In 1994 quite a few of the 27 herds I work for started routinely giving all fresh cows the 2 injection series of Bovilene starting on calving day and there has been a tremendous reduction in sick cows due to unnoticed uterine infections getting out of hand before treatment was started. This practice was done mostly during times of heat stress when metritis development is common.

A client survey was sent out to get an unbiased assessment of client satisfaction with the use of Bovilene for treatment of postpartum metritis. Twenty seven herds were sent questionnaires and eighteen responded. Approximately 2,000 cows had been treated for retained placenta-metritis during the past 2 years. Treatment results were rated as 80% excellent (this was defined as: complete involution by 30 days fresh without any other treatment), 16% good (required other treatment in some form with same result), 3% fair and 1% poor (required follow up treatment after the second postpartum exam). Seventeen out of eighteen reported no bad side effects. When asked even if residues were not a problem only 1 client said they would rather go back to using antibiotics routinely. Seventeen said they would rather use Bovilene. Eleven out of fourteen that commented said they had noticed postpartum cows cycling sooner with the use of Bovilene. Eight of seventeen had used it on every cow during high stress periods with such good results that all eight said they would continue the practice. Client comments were asked for good or bad. They said it saved a lot of time over antibiotic treatment, cows clean up better and cycle sooner, concern over antibiotic contamination of bulk tank was lessened, fewer cows with metritis got sick before treatment was initiated. One client commented he figured Bovilene treatment versus antibiotic treatment saved him around \$5,000.00 in milk discard over the last two years in his 125 cow herd.

### Economic Factor

Herd of 125 milking cows treated 80 cows in a two year period. Bovilene was used during summer months prophylactically.

Cost of treating 80 cows with Bovilene:

80 Cows x 2 treatments x \$4.00/treatment = \$640.00

Versus

Cost of treating the same 80 cows by infusing uterus with Oxytet

80 Cows x 3 treatments x \$.83/treatment = \$199.20

PLUS LOSS OF INCOME

80 Cows x 50# milk/day x 10 days x \$13.50/cwt=\$5,400.00

SAVING THE FARMER \$4,760.00 IN 2 YEARS BY USING BOVILENE VERSUS THE CONVENTIONAL ANTIBIOTIC UTERINE INFUSION METHOD.