

Management of Colostrum

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In my practice area I have taken an approach to the dairy calf disease problem, emphasizing prevention rather than treatment of calf disease. I emphasize three preventive measures in particular: 1) Sanitation of the calving area, 2) Vaccinations of the cow, 3) Proper management of colostrum.

All three are equally important; however, this practice tip is in regard to management of colostrum.

On dairy or calf ranches experiencing a mortality problem we collect blood samples from calves 24-48 hours old and then freeze the serum for later use, or run the sodium sulfite turbidity test immediately. By this test calves are grouped into three groups based on visual turbidity. Then, after 3-4 weeks we correlate our morbidity and mortality data with the sodium sulfite test results. Almost every time we have done this, the correlation has been very good. Calves whose serum has the greatest turbidity in the sodium

sulfite test (normogammaglobulinemic) have less than a 10% mortality, whereas calves with the least turbidity (hypogammaglobulinemic) experience a 30-50% mortality.

The point to be made at this time is that mortality and morbidity were predicted before the calf was 48 hours old. Therefore, many of the factors that determine whether the calf lives or dies have already come into play by this time. It should be emphasized that by the management of colostrum, the percentage of hypogammaglobulinemic calves can be reduced and livability promoted. Material required for this test include: 1) calf identification, 2) serum vacutainers, 3) centrifuge, 4) sodium sulfite 28% solution, 5) measuring apparatus (disposable TB syringes and disposable 3 cc. syringes are adequate). The test consists of mixing 1.9 mls. sodium sulfite with 0.10 ml. calf serum and holding against print to best visualize turbidity.

Two-Bit Tips

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1. Use an old toothbrush to ink in a tattoo.
2. A double-edge razor does a good job of shaving cows for surgery, especially the old-fashioned type with a rake edge. File off the small tooth guards. This gives a slightly protruding edge and hair will not clog it. Especially good for flank surgery with hair running in a single direction. Wash thoroughly with hot water and plenty of soap and then shave. Blades can be purchased economically in thousand lots.
3. Use a trochar and sheath for inserting a nose ring for a bull. Pierce the lower end of the nasal septum; remove the trochar and insert the point of the bull ring into the trochar sheath and push back through the nostril. Nose tongs can be used to steady the head while inserting the trochar sheath.
4. Use an old hoof knife, after it breaks, to open cartons. Excellent holding handle and it can be kept very sharp with a file.
5. A fifteen-foot nylon cord is useful for restraining a cow. Use with a loop on one end. Tie the rope just behind the shoulders of a cow or calf and use a trucker's tie to get easy leverage for tightening. This gives excellent control in most cases for lifting a rear foot, for teat surgery, and for castrating 300-500 pound bulls. All you need is a farmer's daughter or wife to help you!
6. Dr. Harris also demonstrated a cradle for abdominal surgery, umbilical hernia, penis deviation, etc.