

Using Embryo Transfer to prevent Bovine Leukosis transmission in valuable breeding stock

Bovine leukosis is a disease of cattle, which sometimes produces a terminal form of cancer. It is caused by a virus that is found in southeastern cattle. Some herds have as many as thirty percent infected animals. Actually a very small number develop cancerous tumors but the ones that do make the rest of the cattlemen pay. Approximately two percent of all cattle carcasses are condemned, with the majority from bovine leukosis tumors. Signs that the animal has these tumors vary greatly depending on where the tumors are located in the animal. Weight loss is the most common symptom. Paralysis of the rear limbs, intermittent diarrhea, possibly with blood, bulging of the eyes, enlarged lymph nodes, and signs of heart failure are also indications. There is no cure and the disease is always fatal. A simple and best thing to do is pull a blood test sample and send it to the state testing lab through your local veterinary. This will help you cull it out of your herd. Every animal should be tested in your herd. This virus is transmitted primarily by blood. So biting insects, tattoo needles, multiple needle usage for shots, and dehorners must be thoroughly disinfected between uses. Don't practice civil war medicine by using the same instrument on every cow or bull in a day without disinfecting it between uses. We are still doing this on cattle today. I have seen cattlemen that used the same needle until it bent. Also, it is believed that it may be transmitted through blood during birth and the colostrum after.

On our ranch we quarantine all new animals until we get a clean blood test report on the new animals. You would be shocked at what we have carried home with a good health certificate in hand. We acquired a pregnant cow that had excellence EPDs at a registered cattle auction but it later tested positive for bovine leukosis. We let her carry the calf full term. After the calf was born it too tested positive. As I stated before, bovine leukosis is transmitted by blood. An embryo has no blood. So we decided to flush this cow so we could get her genetics without the disease. We got three embryos out of the flush. The embryos were washed as if they were going to be shipped overseas. Two were frozen and one was a direct transfer. The recipient carried the calf full term and delivered a bull calf. I am pleased to report that a negative test for bovine leukosis came back on this bull calf. So we have decided this year to use the other two embryos from the flush. Any animal that has this disease should be put down and clean practices need to be used to prevent the spread of this disease. Every animal should get a new needle for injections. And if more medicine is needed don't put the used needle back in the bottle. A new palpation sleeve should be used for every animal to prevent spreading this disease through blood transfer. Do not use the colostrum from any animal that has not been blood tested for this disease and found negative. Do not put your embryos in recip cows that have not been blood tested negative for sure. If we decide to stop this disease in our herds, it just makes us better cattlemen.

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