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Livestock Health Series

Reproductive Prolapses of Cattle

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Introduction

Occasionally, beef cattle develop problems with prolapses near the time of calving. A prolapse can be basically defined as an abnormal repositioning of a body part from its normal anatomical position. Two distinct types of prolapses occur in the reproductive tract of cattle: **vaginal** or **uterine**. While both types require medical attention and correction, the severity and time of occurrence differ.

Vaginal Prolapses

A vaginal prolapse occurs before calving due to the increased pressure in the abdominal cavity during the latter stages of pregnancy. This type of prolapse is more common than the uterine prolapse, and it typically looks like a pink mass of tissue about the size of a large grapefruit or volleyball. Once this tissue becomes prolapsed, it is exposed to environmental elements (wind, dust, sun, injury) and to potential infectious organisms.

Vaginal prolapses (Figure 1) are recurring problems. If the vaginal prolapse occurs and is repaired, the cow is highly likely to prolapse again next year. This type of prolapse can also be an inherited trait. The daughter of a cow that experienced this problem will have an increased likelihood of suffering a vaginal prolapse herself. Not only should the affected cow be culled but also any daughters from the cow should **not** be kept as replacements. In addition, a bull calf retained from a cow that has experienced a vaginal prolapse could one day pass on the genetic trait to his female offspring and propagate the problem in the herd.

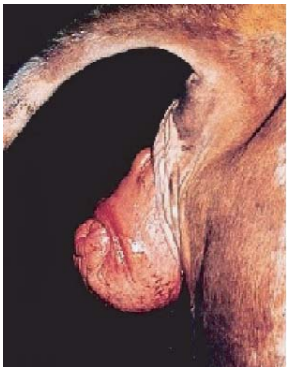

Figure 1. A vaginal prolapse

Older cows, cows carrying twins or cows with Brahman (*Bos indicus*) ancestry are more prone to having vaginal prolapses. Cows that are limited to grazing clover pastures could also be at a higher risk of vaginal prolapse due to phytoestrogens that may be produced by that forage type. To help prevent vaginal prolapses, it is important to restrict cows from becoming overly fat during the last trimester of pregnancy. Provide a ration to keep the cow herd with a good body condition score but not overly conditioned.

Although a vaginal prolapse is not ordinarily life threatening, it should be repaired as soon as possible. Once the vaginal tissue has been prolapsed, the blood supply to the tissue is compromised. This leads to swelling of the tissue while it is on the outside of the cow's body. The longer it is left out, the more it will swell, which makes it even more difficult to correctly

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reposition. If the prolapse increases in size, pressure is placed on the urinary passage. This restricts the cow's ability to urinate. She may continue to strain trying to urinate (unsuccessfully), and this will further magnify the problem until the prolapsed tissue is pushed back inside.

Before being pushed back into the cow, the tissue that has been prolapsed should be cleaned with warm water and a mild disinfectant. Otherwise, contamination could lead to an infection. If a prolapse has been exposed for several days before being discovered, the tissue may be dry, damaged and inflamed, making it more difficult to clean and push back in. Once the tissue is pushed back in, several stitches can be applied across the vulva (or a purse-string stitch can be used) to hold it closed and to prevent future prolapses. The cow is still able to urinate through the stitches. The stitches should be removed when the cow begins to calve. If they are not removed, she may tear them out or have difficulty calving. When she goes into labor, the stitches can be cut and then gently pulled out. Once she has given birth, the increased abdominal pressure that caused the prolapse will no longer exist. The cow should not be bred back, and she should be culled from the herd since this problem is likely to recur.

Uterine Prolapses

A uterine prolapse is typically seen immediately following or within a few hours of calving. Compared to the vaginal prolapse, the uterine prolapse is larger, longer (usually hanging down to the hocks when standing), more deep red in color and covered with the "buttons" where the placenta was attached (Figure 2). A uterine prolapse is considered a medical emergency; therefore, this condition is life threatening. If the affected cow is not treated quickly, she could go into shock or die from blood loss. Contact your veterinarian for assistance with this procedure. If the uterus is pushed back improperly, it could result in internal bleeding and death of the cow.

With uterine prolapses, if a good, clean job is done replacing the uterus, it may not be necessary to cull the cow from the herd. These cows have the potential to return to the herd and maintain a normal reproductive existence. However, if an infection occurred when the uterus was replaced, the cow may be slow to rebreed or may not breed back at all. Although there is no genetic predisposition to uterine prolapses, be aware that cows that have experienced a prolapsed uterus have a higher risk of prolapsing again compared to cows that have never experienced this condition.

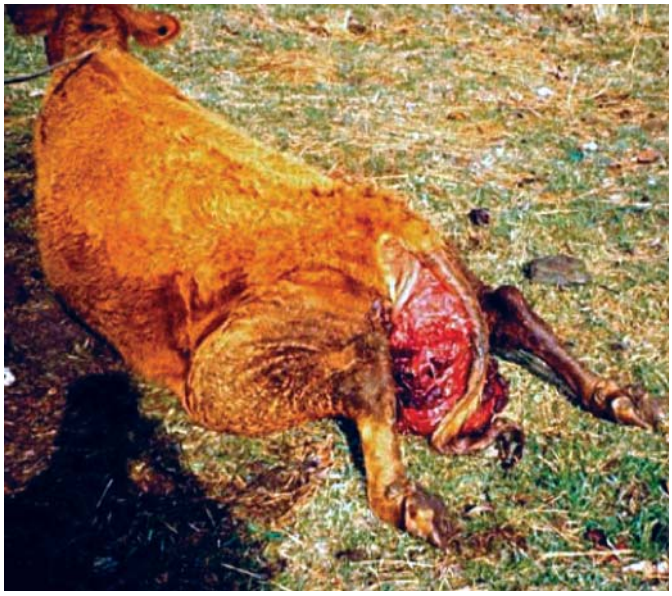

Figure 2. An example of a uterine prolapse

Potential factors that can predispose a cow to a uterine prolapse include a difficult calving (dystocia) that causes injury or irritation of the external birth canal, severe straining during labor or excessive pressure applied when pulling a calf. Other factors may include nutrition-related problems such as low blood calcium levels (more common in dairy cows) or overly thin cows that calve in poor body condition. To avoid problems with uterine prolapses, try to decrease the potential for the cow being affected by a predisposing factor listed above.

For more information on diseases that affect beef cattle, contact your county Extension office or your local veterinarian.

References

Pictures were provided with permission by The Drost Project at www.drostproject.org. The web site is maintained by Dr. Maarten Drost, professor emeritus, University of Florida College of Veterinary Medicine.

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