



Dealing with Prolapses

by Heather Smith Thomas

Prolapses pose major health and economic concerns to beef cattle producers. Treating a prolapse in a timely manner is critical to the overall health and reproductive soundness of a cow. Cows can suffer from vaginal, uterine and rectal prolapses, with the two former being most common.

Vaginal prolapses

Vaginal prolapses generally occur before calving. Some cows have a structural weakness which causes part of the vagina to prolapse during late pregnancy. Most cases occur a few weeks prior to calving, when the increased size of the uterus puts pressure in the abdomen and the ligaments in the pelvic region begin to relax. When the cow is lying down (especially if her hind end is downhill), this pressure may cause vaginal tissue to prolapse. Mild prolapses, signified by a pink bulge the size of an orange or grapefruit, will usually go back in when the cow gets up. However, if she starts to prolapse each time she lies down, the tissues may be forced out to the point where they cannot go back in. Sometimes the presence of a mild prolapse will stimulate the cow to strain, making the prolapse worse and putting the tissue at risk of becoming damaged and dirty.

Of utmost concern when tissues turn inside out is that blood supply is restricted, causing the tissue to swell. Swelling will continue to occur while the tissue is left outside the body, making it harder to replace. If the cow is near calving, this swelling may make the birth difficult. For these reasons, vaginal prolapses should be dealt with as soon as possible and can be managed using these guidelines:

Clean. The prolapsed tissue must be cleaned and replaced and then kept in place. Restrain the cow and wash the prolapse gently with warm water and mild disinfectant before pushing it back in. Note that if a vaginal prolapse has been out for several days, the tissues may be dry and damaged and harder to clean and push back in.

Stitch. Take several stitches across the vulva to hold it shut and to prevent future prolapses. Umbilical tape is less apt to pull out than suture thread. A large, curved surgical needle is best for making the stitches. The stitches should be anchored in the haired skin at the sides of the vulva. This skin is thick and tough and will not tear out as easily as the skin of the vulva. As it is less sensitive, it is also less painful for the cow when stitching. It usually takes at least three

cross stitches to keep the vulva closed safely so the inner tissue cannot prolapse if the cow strains. She can still urinate through the stitches, but the vulva will not open enough for another prolapse.

Remove the stitches. If she is stitched, she must be watched closely for calving. The stitches must be removed when she starts to calve or she will tear them out or have difficulty calving. When she goes into labor, stitches can be cut with surgical scissors, tin snips, a sharp knife, etc. and pulled out gently.

Monitor. After the calf is born, the vagina rarely prolapses again until the next year, when the cow gets closer to calving again. There is no need to put a stitch back in after she calves, as all of the pressure against the tissue has been relieved. Once a cow prolapses, she almost always does it again — often worse the next time — or starts earlier during late gestation. Most ranchers cull a cow once she has prolapsed.

The real challenges are the rare few that prolapse sometime after calving, a situation usually associated with riding during estrus. If cattle are out in large pastures at breeding time, the vagina may be prolapsed for several days before someone notices, and it will become dry, dirty and damaged.

Robert Callan, Ph.D., Colorado State University, says vaginal prolapses are a nuisance but not life-threatening. “The main thing to realize about a vaginal prolapse is that once an animal does this, she will likely repeat the problem the next year, and that there may be a genetic basis.”

Uterine prolapses

While vaginal prolapses tend to occur right before calving, uterine prolapses occur right after calving and are difficult to predict. They are normally a onetime occurrence, and it is generally safe to keep a cow suffering from a uterine prolapse in the breeding herd if she rebreeds on schedule.

“Sometimes there may be an underlying cause such as a mineral imbalance like low calcium,” Callan says.

The cow may prolapse immediately after calving or a short time later, while the cervix is still dilated. If the cow keeps straining because of continued contractions and after pains, she may push the uterus on out. This situation can happen whether the birth was easy or difficult.



Vaginal prolapses will appear as a pink bulge the size of an orange or a grapefruit.



It is very important to clean and disinfect the area to avoid infection and tissue damage.



The umbilical tape stitches should be anchored in the haired skin at the side of the vulva because the skin is thicker, tougher and less sensitive.



Three cross stitches will suffice to keep the vulva safely closed.

The far end of one uterine horn may begin to turn inside itself, which allows the cow to push against it. To lessen the likelihood of a uterine prolapse, get the cow up as soon as possible after pulling a calf. Getting her up and moving around will usually help the uterus drop back down into the abdominal cavity and will straighten the uterine horns. Without a partially inverted horn against which to strain, the cow generally will not prolapse.

If she does prolapse, the earlier the problem is detected, the better; the prolapsed organ is still clean and easier to put back in compared to trying to deal with it hours or days later. It is also easier on the cow if the organ is replaced quickly rather than after it has gotten dirty, damaged or, possibly, bruised.

“The keys to successful management of uterine prolapse are early recognition, moving the cow to a sheltered environment, minimizing damage and contamination of the exposed uterus, and prompt replacement,” Callan says. Below are some areas of concern when dealing with a uterine prolapse.

Cow position. “Very few producers try to replace the uterus themselves; it is challenging without the benefit of an epidural injection to diminish the cow’s straining,” Callan says. “Positioning the cow correctly is also helpful for replacing a prolapsed uterus. If her front end is pointed downhill [and not fighting gravity], this will help. We like to lay the cow down so that she is lying on her breastbone and belly, and pull her hind legs back behind her so she is ‘frog-legged’ to tilt the pelvis up. At that angle she is not as able to keep pushing the uterus back out again as you work on it, with gravity in your favor.”

Clean facilities. “If I am heading out to help a rancher with a uterine prolapse, I would hope the cow is moved into a sheltered area with dry ground and good bedding if at all possible. You want the area clean, with good footing. You also want ropes, hobbles and a halter to restrain the cow. I will give her an epidural, and usually an anti-inflammatory drug such as flunixin meglumine [Banamine]. Many veterinarians choose to give an antibiotic as well, since the uterus is likely to be contaminated.”

Also, good supplies to have on hand for cleaning are plenty of warm water, mild soap or a disinfectant, and a large plastic garbage bag to place underneath the uterus to keep contaminants away. Callan drapes the uterus in the garbage bag.

Edema. The longer the uterus is out, the more edema (swelling) builds up in the tissues. It takes a lot of work to squeeze edema out of tissues and to push the uterus back through the pelvic canal. “Something that works to reduce edema is to apply sugar to the surface. This works as an osmotic agent to pull fluid out of the tissues and help shrink them as you are pushing the uterus back in. The high concentration of sugar on the tissue surfaces also has some antibacterial properties,” Callan explains.

Staying in place. “One of the most crucial factors to ensure that the uterus stays in is to extend both horns fully to their proper position,” he says. If there is even a small tip of horn that is still inside out, it gives the cow something to push against, and she may push the uterus right back out again if she strains.

“Sometimes it can be difficult to reach that far, with a long uterine horn. One thing that can help is to use a



While culling animals with vaginal prolapses is highly encouraged, females with a uterine prolapse can be retained.

clean wine bottle to extend your reach. Some veterinarians instill an antibiotic into the uterus, but many don’t. If there’s a chance that the cow is hypocalcemic, the veterinarian will also treat her with calcium,” he says. This treatment increases uterine tone and helps minimize the chance of her prolapsing again. Oxytocin can also be administered to help improve uterine tone once the uterus is replaced.

The next step is to keep the cow from pushing it right back out again. The vet may give the cow another injection of local anesthetic afterward to keep her from straining or may put a few sutures across the vaginal opening to keep the organ from being pushed out again until the cervix has contracted and there is no danger of recurrence. The stitches can be removed in a few days.

Uterine damage. Whenever a uterus prolapses, there is always risk of damage to the uterine arteries. If a uterine artery ruptures or tears, the cow bleeds into the abdominal cavity. Sometimes the artery is stretched and starts bleeding again once the uterus has been replaced. “The cow could bleed out at that point. Many of the deaths that occur after replacing the uterus are due to a ruptured uterine artery, and there’s really nothing you can do for this,” Callan says.

In some instances, it is not practical or feasible to replace the uterus, particularly if it is severely damaged. “In these cases, the best option might be to amputate the uterus to save the cow. There are surgical methods, and also some banding methods, similar to banding for castration. Both methods work. The banding method tends to be easier and quicker, with similar results to surgical amputation,” he says.

If the uterus is not out very long and is kept clean and undamaged until it can be replaced, the cow generally recovers. If the uterus is replaced promptly, most cows that prolapse will rebreed and have no problems with the next calving. Repetition is rare. **HW**