



Ask the Vet

“Why aren’t my cows cleaning, Doc? And what can I do when cows don’t clean properly?”

Retained Placentas and What To Do About Them

~ By Darren Zimmerman, D.V.M.



Retained Placentas: The Basics

First, let’s define what is normal.

Expulsion of the placenta normally happens within 12 hours of the calf being born. The same uterine contractions that helped push out the calf, will also help expel the placenta. After the calf is born, the connections between the uterus and the placenta detach. With each contraction the uterus gets smaller and more of the placenta exits through the cervix.

If after 12 hours, the placenta is still in the uterus, it is considered retained. A retained placenta can happen when the uterus stops contracting, the placenta doesn’t detach properly, or a combination of the two. In the United States dairy industry, 7.8% of cows experience a retained placenta.

If the uterus stops contracting, the placenta will not be expelled. Exhaustion and milk fever are the most common causes. Milk fever is a decrease in blood calcium levels. This causes weak muscles, including the uterus. Crystal Creek® carries a variety of calcium products, including Fresh-N-Easy™, Saf-Cal™ and Fresh-N-Drink™ to help cows with low blood calcium. Exhaustion can follow a difficult birth or multiple births. In these cases, the placenta may have detached from the uterus and may be found just sitting inside the flaccid uterus. Be careful though, a flaccid uterus is also at a high risk of prolapse.

Why won’t the placenta detach? The separation of the placenta from the uterus is a complex process. The placenta must be old enough. Placental maturity happens 2-5 days before the end of an average gestation. Early calving due to twins, abortion, or induction, will often lead to a retained placenta.

Blood flow to the uterus and placenta needs to decrease after birth. Cesarean sections and difficult calvings commonly lead to retained placentas because the birthing process does not happen normally; thus preventing the normal sequence of events that reduce blood flow and promote placental detachment from the uterus.

The immune system also plays an important role in the placental detachment process.

Once the calf has been born, the white blood cells of the immune system act like little PacMan, “chewing” away at the connections between the placenta and the uterus, thus freeing the placenta. If the immune system is compromised, this process is significantly reduced, and the placenta remains attached.

Nutritional deficiencies can be one cause of immunosuppression in fresh cows. The immune system needs appropriate levels of calories, Vitamin E and Selenium to function optimally. The growing fetus becomes quite a draw on the maternal system in the last trimester; especially the last couple weeks prior to calving. If the cow does not consume enough calories, vitamins and minerals, the immune system will become compromised. The cow will divert nutrients to the growing fetus and sacrifice her own systems. Other feed related issues such as moldy feed or mycotoxins reduce immune function and increase the risk of a retained placenta.

Stress also reduces immune function. Things like livestock interactions, weather, competition for feed, water, or space could all have a negative effect on the immune system. There are also genetic factors that affect the immune system, and the industry is just beginning to understand those interactions. You may already know that certain cow family lines on your farm have fewer health problems. Or perhaps, certain bulls don’t work



well in your herd. Work with your breeder to develop a mating program and try to prevent inbreeding or certain genetic pairs that are known problems. This kind of information is more available than ever before. You and your veterinarian may also consider genetic testing for health traits.

What To Do When a Cow Has a Retained Placenta

If the cow is eating, drinking, and making milk normally, then no treatment is warranted. A retained placenta may resolve itself within a week to 10 days. It would be good to have your veterinarian check during the next visit to make sure the uterus is clean and returning to normal.

However, resolution on its own is usually not the case. The cow will likely need to be monitored closely over the next few days. Decreases in appetite, activity or milk production can be indicators that help is needed. Cows may or may not have a fever with a retained placenta. An increase in the cow's water intake or a foul odor are other indicators that treatment is necessary.

Premature births, multiple births, dystocia, induction, etc. are likely going to have problems with retained placenta. Supportive care afterwards is most important. This includes a balanced diet, and time and space to rest and heal. Anti-inflammatories like aloe and NSAIDS can provide some help in these situations. Antibiotics may also be necessary. A Crystal Creek® consultant or veterinarian can help advise you on the products that will best help you and your animals.

In conclusion, retained placentas happen for a wide variety of reasons and are not uncommon among cows. Focusing on things like the cow's nutrition plan during late gestation is important. The ingredients in the diet or ration must be digestible and available. Basing the diet on digestibility of the forage and availability of vitamins and minerals is necessary to get the best performance. Minimizing stressful events around calving will also help reduce retained placentas. If you are concerned about the number of retained placentas in your herd, work with the Crystal Creek® nutritionists and veterinarians to develop a plan for your herd. Give us a call; we're here to help.