

Ask A Vet: Plugged Plumbing-Read On

Sunday, October 9, 2016

Dear Dr. Weldy's,

My Boer goat wether has been kind off lately - he has been swishing his tail quickly, stretching/kicking and looking back at his belly and not eating very well. He is urinating, but it just seems to drip out occasionally. I am new to goats and wondering what could be going on with him.

Sincerely,

A concerned goat owner

Dear Reader,

Thank you so much for your question! You are right to be concerned about your goat, it sounds like he could be struggling with urinary calculi (stones). This is a common problem in male goats - wethers, especially. The way we feed our goats is often the primary culprit for the formation of these stones. Alfalfa hay and grain increases the risk of goats developing calculi. These feeds have a calcium to phosphorous ratio that is not correct for goats and they increase urine pH to a level that favors stone and sludge formation. Another risk factor is inadequate access to water which can lead to more concentrated urine and more stone formation. If stones are formed, they can be located anywhere from the urinary bladder, the urethra and what is called the urethral process of the goats urinary tract. If left unchecked, the stones can lodge in the urinary tract and cause partial or complete obstruction of urine flow. Partial obstructions can lead to scarring of the urethral lining that can be permanent and complete obstructions can lead to kidney damage, as well as bladder and urethral rupture.

Signs to look for are similar to what you have noticed: straining to urinate or appearing constipated, stretching, kicking, looking at the side, hunched appearance, rapid tail swishing, decreased appetite and energy level, blood in the urine, bloat and even death. If you suspect your goat is having trouble urinating, you should call your veterinarian right away! If the wether/buck is unable to urinate, likely the first thing your veterinarian will try is to cut the pizzle (urethral process - narrow area at the end of the penis) off as often the obstruction is located there. This tends to relieve the obstruction 66% of the time. Further treatment will still be needed as there is usually stones in the bladder or further back the urethra that can lead to re-obstruction. If cutting the urethral process off does not work, surgery will be needed - often at a referral hospital. If the urethral process amputation works, or if the obstruction is only partial, the goat should be fed ammonium chloride(urinary acidifier) daily at 300mg/kg to attempt to dissolve the remaining stones. Anti-inflammatories will probably also be prescribed as well as a diet change.

An ounce of prevention is worth a pound of cure when it comes to urinary calculi in goats. Some evidence exists that castration prior to 6 months old causes a decreased diameter in the goats urethra and can lead to him not being able to fully extend his penis. This is a risk factor for obstruction and as such some veterinarians advise delaying castration of male goats to 4-5 months old. Goats should be fed grass (not alfalfa) hay or pasture. Excess protein and magnesium in grain can also lead to stone formation. Usually the culprit is an inappropriate calcium to phosphorus ratio (should be 2:1). Loose salt and mineral mix is recommended to naturally keep the urinary tract flushed out. Salt water can also be sprayed on hay to encourage adequate water intake.

If you have any additional questions or suspect your goat is obstructed, please contact your local small ruminant veterinarian.

-Dr. Ashley Vander Wey