



Deciphering Dystocia

RABBIT

With Dr Jay E. Ariez, VMD

The term dystocia literally means "difficult birth." Rabbits are commonly revered as re-productive mavericks and their ability to reproduce is only rivaled by smaller rodents. True dystocia is relatively rare in domestic rabbits but can be uniformly fatal if ignored or not addressed correctly. This article will discuss normal pregnancy, abnormal pregnancy, and give methods of treatment for this serious condition.

Normal gestation of a doe is approximately 31 to 32 days in length. This is merely an average and can range from 28 days to 36 days. The gestation length is affected by a variety of factors such as age of the doe, weight, genetics, litter size, nutritional status, environment, and several more aspects. Parturition in domestic rabbits is a quick process and is usually complete in 30 minutes following onset. Both the anterior and breech positions are normal for kits being born. An effective, inexpensive way to screen for post-partum dystocia is to get into the habit of palpating all does within 24 hours of giving birth for signs of retained fetuses.

Cause & Diagnosis

The cause of dystocia, like gestation length, is affected by multiple parameters. They include obesity, the size of the individual fetuses, the relative size of the

doe's pelvic canal compared to the fetus, or failure of the uterus to contract (uterine inertia). Does close to parturition should be checked frequently for signs of dystocia. They include persistent contractions, bloody discharge, straining with no obvious progress, or a green-brown discharge from the vagina.

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Obvious abnormalities, such as a fetus that is retained in the pelvic canal and cannot be delivered, can be addressed by the breeder. GENTLE manipulation and removal of the kit from the pelvic canal digitally (using mostly your fingers) can yield positive results if done carefully. As stressed in every species experiencing dystocia, lubrication is a compassionate and necessary aid!

Treatments

Oxytocin is the most readily available drug available for breeders to use that will stimulate parturition. This is

A safe delivery and a healthy litter is the goal of every responsible breeder.



Photo by Michaela Flower

a hormone normally produced in the hypothalamus. 1-3 units given intramuscularly (hindquarters or along the back) will usually elicit a response. I prefer to give 1 unit at a time, evaluate the effect, and re-administer another unit up to three doses. The typical concentration of this drug is 20 USP/mL which translates into 0.05 mL per dose (this is a VERY small volume!).

When uterine inertia is evident in domestic rabbits, I advise the use of oral calcium gluconate prior to administration of oxytocin. These two drugs act synergistically. Oxytocin will increase the frequency of uterine contractions while calcium gluconate will increase their relative strength. Small breeds of rabbits will usually tolerate approximately 5 mL of 10% calcium gluconate while larger breeds will need up to 10 mL given for a desired effect.

Following administration of either drug, the doe should be placed in a quiet, dark room with few disturbances. Allow 30-60 minutes for the desired effect of one or both drugs. I usually repeat oxytocin injections approximately 30 minutes apart if there is no effect. When drug therapy proves ineffective for induction of parturition, surgical intervention is warranted if the litter and/or the doe are salvageable. Caesarean section can be per-



Photo by
Caitlyn Lee

formed by veterinarians who have experience in spaying and neutering rabbits routinely. Because the uterus is friable even in non-pregnant does compared to cats and dogs, tissues must be handled delicately if the uterus is to be saved.

Follow Up

Does who have had one episode of dystocia are at an increased risk of it occurring in future parturitions. Because of this, care should be taken to keep adequate records and consider culling animals that consistently have difficulty giving birth. As mentioned earlier, true

dystocias are relatively rare in domestic rabbits so it is important to recognize the normal series of parturition, signs of dystocia, appropriate therapy, and when veterinary intervention is necessary.

References available upon request

Jay E. Hreiz, VMD.

Chairman of the ARBA Rabbit & Cavy Healthy Committee, Dr. Hreiz is a graduate of Penn's Veterinary School and currently owns a small animal / exotics practice in the Charlotte, NC area. He is also an ARBA judge # 789.



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