Mucometra of the uterus and vagina in a La Mancha doe caused by vestibular and vaginal stricture secondary to dystocia

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Persistent hymen, cervical laceration, fibrosis, and congenital strictures are commonly reported causes of mucometra in the doe and other species; mucometra caused by stenosis of the vestibule and the caudal vagina, due to dystocia, has been poorly documented in goats. This case report describes the treatment of a doe with mucometra caused by fibrosis and stenosis of the vestibule and caudal vagina. A 1.5-year-old La Mancha doe was presented to the University of Tennessee’s Veterinary Medical Center in January 2016 to determine the cause of her infertility. The doe had a dystocia in the spring of 2015 that caused severe vaginal and vestibular damage. A thorough breeding soundness examination revealed fibrous tissue producing a stricture approximately 3 cm cranial to the vulva, as well as anechoic fluid in the uterus and vagina seen on transrectal ultrasound. Hydrometra or mucometra of the uterus and vagina as a consequence of vestibular/vaginal fibrosis/stenosis was diagnosed, and surgical correction of the obstruction was deemed necessary for both general and reproductive health. The patient was anesthetized and a midline episiotomy was performed and extended 6 cm cranially to allow visualization of the stricture. Transrectal ultrasound was used to guide placement of a 10 cm teat cannula through approximately 3 cm of fibrotic tissue into the fluid filled vagina. Metzenbaum scissors were used to dissect the tissue cranially past the stricture. Enlargement of the opening was accomplished with a 1 cm diameter trephine, followed by progressively larger trocars. After a copious amount of clear, mucus was evacuated from the uterus and vagina, a one inch rectal prolapse ring was placed at the level of the obstruction and secured with non-absorbable suture to maintain the opening while healing. A urethral extension was performed using a technique described for cows and the episiotomy was repaired as a second degree perineal laceration. The rectal prolapse ring was removed six days after surgery; a synchronization protocol for a fixed time insemination with a controlled intravaginal drug release (CIDR) was started 18 days after surgery. The doe was bred 52 hours after removal of the CIDR by laparoscopic artificial insemination. The patient was diagnosed as pregnant by a blood test for pregnancy-specific protein B (bioPRYN) 47 days after artificial insemination.

Keywords- Doe, dystocia, fibrosis, vagina, mucometra