

POSTER SESSION

Uterus unicornis in a maiden mareStephanie Walbornn,^a Nathaniel Newton,^b Maria Schnobrich^b^a*Rood and Riddle Hospital in Wellington, Wellington, FL,*^b*Leblanc Center for Reproduction, Rood and Riddle Equine Hospital, Lexington, KY*

Uterus unicornis is a congenital abnormality that has been reported in several domestic species, but occurs uncommonly in mares. A previous report described a successful foaling in a Warmblood mare with this condition, but the foal was small and dysmature.¹ Two additional cases reported in American paint mares have been described.^{2,3} The case reported herein corresponded with a maiden Standardbred mare that was imported from Europe. Breeding management was attempted over 1 estrous cycle but the mare did not become pregnant. She was referred for a breeding soundness evaluation, as an abnormality was suspected on transrectal palpation of her reproductive tract. Palpation and transrectal ultrasonography of the reproductive tract revealed the absence of a normal left uterine horn. Both ovaries were normal in shape and size and ovary was active. The left ureter appeared normal and was traced to the left kidney. Urine was visualized moving through the left ureter. The right uterine horn appeared normal and no uterine edema or fluid was observed. Cervix was toned and had a competent canal. Hysteroscopic examination was performed and a normal uterine body, right uterine horn, and right oviductal papilla were observed. There was no evidence of a left uterine horn presence. Based on these findings, a diagnosis of uterus unicornis or segmental aplasia of the Müllerian ducts was made. This abnormality has been observed in other species. In cattle, it is associated with a white coat phenotype in breeds such as Shorthorn and Belgian blue.⁴ This condition is associated with failure of the development of the Mullerian ducts and appears to be genetically inherited. Breeding this mare to carry to term was discouraged and assisted reproductive techniques such as embryo transfer and ovum pick up were recommended. The client decided not to utilize this mare for breeding. This is the first report of uterus unicornis in a Standardbred mare. Although rare, this condition can cause infertility in mares and may accompany other genetic or congenital abnormalities. It is important to pursue genetic testing to ensure the mare does not have karyotypic abnormalities. Further diagnostic procedures to assess genitourinary function are also important as renal

agenesis and ureteral abnormalities can occur ipsilateral to the affected uterine horn.³

Keywords: Uterus unicornis, congenital abnormality, mare infertility

References

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A congenital abnormality in a mare: nonpatent uterus

Christine Bartley, Maria Schnobrich

Rood and Riddle Equine Hospital, Lexington, KY

Failure of normal uterine development was diagnosed in in a 4-year-old Thoroughbred mare. Congenital abnormalities of mares have been described; segmental aplasia in other species, such as cattle, is often associated with genetic abnormalities. This mare had no history of uterine infusions, breeding, or vaginal examination prior to initial evaluation performed at 3 years of age (in winter) while in training. Transrectal palpation and speculum examination revealed no abnormalities. Mare was presented again 2 months later for a prebreeding evaluation. Mare had normal overall appearance, body condition score 6/9, normal mammae and external genitalia with a Caslick's in place. Transrectal palpation and ultrasonography revealed a mildly flaccid uterus, normal shape and size to the ovaries with multiple 20 mm follicles. Scant free fluid was observed in the uterine horns with swirling heterogeneous echogenic material and with no endometrial edema. Cervix was short and flaccid. Vaginoscopy revealed a small hypoplastic cervix