Endometrial cyst ablation using uterine alligator forceps in three broodmares

B.D. Radny, J.L. Klabnik-Bradford, T.M. Prado College of Veterinary Medicine, University of Tennessee, Knoxville, TN

Introduction

Uterine or endometrial cysts vary in shape and size and can be seen as single or multiple cysts on ultrasound. The presence of endometrial cysts are important because they can be mistaken for a pregnancy by resembling an embryo on ultrasound or palpation, interfere with embryo mobility and induce pregnancy loss. The risk of these consequences are greater when the collective volume of the cyst(s) is higher.^{1,2}

Diagnostic approach and treatment

Three mares, varying in breed and ages, between 6 to 22 years, underwent a breeding soundness examination at the University of Tennessee during the 2017 breeding season. All three mares had a single endometrial cyst at the uterine lumen that ranged from 25 to 55 mm in diameter. Mares were artificially inseminated during the previous estrous cycle, but did not become pregnant. Cyst ablation was recommended to allow establishment of pregnancy. Different techniques were offered, including CO2:YAG laser ablation technique. 1,2 however the clients elected a new technique—partial removal of the cyst wall via uterine alligator forceps. Theoretically, this would prevent the cyst from refilling with minimal scaring.

Results and discussion

In order to ablate each cyst with the uterine biopsy tool, the cervix was dilated. Next, the tool, driven by the clinician's hand, was introduced vaginally and continued into the uterine lumen. The cyst was held between the index and middle finger as the instrument was held against the cyst. A piece of cyst wall was cut, as is performed for a uterine biopsy. Transrectal ultrasonography confirmed complete ablation of the cyst. Following cyst ablation, two of the mares bred on the next estrous cycle, became pregnant, and are expected to foal in the spring of 2018. The third mare came back into estrus late in the season; the owner decided to wait until spring 2018 to breed her.

Keywords: Mare, endometrium, cyst, pregnancy, biopsy forceps

References

- Pycock JF: Breeding management of the problem mare. In: Samper JC, editor. Equine breeding management and artificial insemination. 2nd edition. St. Louis: Saunders, Elsevier; 2009. p. 141-142.
- LeBlanc M, Lopate C, Knottenbelt D, et al: The mare. In: Knottenbelt D, LeBlanc M, Lopate C, et al, editors. Equine stud farm medicine and surgery. London: Saunders, Elsevier; 2003. p. 203-304.