Normal parturition after unilateral ovariectomy and uterine leiomyoma removal in a Thoroughbred mare


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Uterine tumors are rare in horses. Leiomyomas, tumors arising from smooth muscle tissue, are the most commonly diagnosed equine uterine neoplasm.\(^1\,^2\) Leiomyomas are usually benign and pedunculated, but may also present as an intramural mass.\(^2\,^3\) Leiomyomas are sometimes associated with infertility.\(^4\)

A ten year old Thoroughbred mare presented to the University of Florida College of Veterinary Medicine for evaluation because of a two year history of infertility. Rectal palpation and ultrasonography revealed a 5.23 cm, well-circumscribed mass located at the tip of the left uterine horn without involvement of the left ovary. This was confirmed by hysteroscopy. Doppler examination revealed the presence of three large vessels associated with the mass. Manually assisted laparoscopic ovariectomy and left uterine horn mass removal (approximately one-third of the horn) were performed under standing sedation. Histopathologic evaluation of tissues revealed fusiform cells forming broad interlacing fascicles with a fibrovascular connective tissue stroma, consistent with a leiomyoma. There was no involvement of the papilla of the oviduct. The mare had an uneventful recovery. She was bred by live cover and conceived twins as a result of the first mating. After successful manual reduction of one embryonic vesicle, the mare carried the remaining pregnancy to 338 days gestation. The mare delivered a healthy male foal with an estimated weight of 65 kg. Parturition was uneventful and placental evaluation revealed pregnancy confined to one horn.

Uterine leiomyomas often cause infertility in the mare due to the obstructive nature of masses and interference with maternal recognition of pregnancy. Uterine biopsy is a definitive diagnostic method. Surgical removal of the mass(es), which may involve unilateral ovariectomy and partial hysterectomy, is recommended.\(^4\) This case documents successful maintenance of pregnancy after leiomyoma removal including one-third of a uterine horn.

References