

A case of juvenile uterine leiomyoma in a yearling Thoroughbred filly successfully removed by manual trans-cervical debridement

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Reproductive tract neoplasia in the mare is uncommon, and uterine and cervical neoplasia is rare. The most commonly reported uterine tumour is leiomyoma, typically seen in animals older than seven years of age. There are reports of a leiomyoma and a fibroleiomyoma in yearling paternal half sibling Appaloosa fillies¹ and a fibroleiomyoma in a 2yo Arabian filly. To the author's knowledge, there have been no reports of a uterine leiomyoma in a Thoroughbred yearling filly. On 21 July 2009, a bay yearling filly presented with signs of discomfort, and a bloody vulval discharge, which had been noticed three weeks previously whilst being broken for racing. Physical examination was unremarkable. Reproductive examination included a *per vaginum* speculum examination where blood was detected in the vestibule, and *per rectum* palpation and ultrasonography identified a heterogeneous mass greater than 8cm in diameter in the left uterine horn. Hysteroscopy revealed a lobulated mass of varying hues from grey-white to dark red/purple immediately cranial to the cervix. A sample of the firm and friable mass was submitted for histopathology. The mass consisted of spindle to stellate cells in sheets, which stained positively for vimentin, desmin, and actin but negative for Factor VIII, which confirmed the cells were of smooth muscle origin. The histopathological diagnosis: juvenile uterine leiomyoma with secondary necrosis, bacterial infection, and severe inflammation. Standing chemical restraint with romifidine and butorphanol, and premedication with antibiotics (penicillin and gentamicin) and NSAID's (flunixin), allowed for careful manual manipulation of the caudal reproductive tract. The cervix was dilated manually, enabling hand access to the uterine mass. The 2.5 kg mass was manually debrided by removing the lobules *per vaginum*. oxytocin, systemic antibiotics, and phenylbutazone were administered for three days post-surgery. A small remnant of the lesion was detected hysteroscopically two weeks later and removed. Six weeks later, no lesions were detected ultrasonographically, and the uterus involuted uneventfully. Removal of a uterine tumour usually requires invasive surgery involving at least partial hysterectomy. In fillies, recurrence of the tumour has been reported. Whilst recurrence cannot be guaranteed in this case, telephone review with the trainer and owner did not indicate any signs of reproductive tract abnormalities in January 2018. This is the first reported case of juvenile leiomyoma in a Thoroughbred yearling filly that was successfully removed by manual trans-cervical debridement.

Keywords: Leiomyoma, uterus, yearling, filly

Reference

1. Romagnoli SE, Momont HW, Hilbert BJ, et al: Multiple recurring uterocervical leiomyomas in two half-sibling Appaloosa fillies. *J Am Vet Med Assoc* 1987;191:1449-1450.