Pyometra in a Standardbred mare

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Pyometra in mares requires intensive treatment, as it leads to endometrial degeneration. An asymptomatic 19 year-old Standardbred mare was presented with a chief complaint of an abnormally enlarged uterus, discovered by palpation. Her reproductive history included untreated chronic uterine fluid accumulation, and breeding by a stallion ten months earlier. The differential diagnosis included pyometra, endometritis and pregnancy. Examination showed an inward sloping vulva and sunken anus. A transrectal palpation and ultrasonography revealed the mare was non-pregnant, had a toned cervix, an enlarged uterus containing > 10 cm grade IV fluid, a corpus luteum on the right ovary, and no significant structures on the left ovary. There was no vaginal discharge, and no cervical abnormalities. A self-retaining catheter was passed into the uterus and 15L of purulent exudate was drained, which grew >2+ Streptococcus zooepidemicus, sensitive to ampicillin and sulfadiazine/trimethoprim (TMS). The uterus was lavaged with saline, and 200mls of 3.3% of N-acetylcysteine (NAC) was infused into the uterus and left overnight. The mare was then sedated for hysteroscopy, which revealed a hyperemic endometrium, and purulent exudate tightly adhered to the uterine wall. A second uterine infusion of NAC, removed by uterine saline lavage 12 hours later, was performed, and followed by infusion of 500mg of ampicillin in 60mls of sterile water. The mare was placed on oral TMS at 30mg/kg, twice daily for five days. Reevaluation a week after the last treatment, showed no fluid accumulation, and Caslick’s surgery was performed. Three months later, the mare was found to be in early transition with 2cm of grade 0 intrauterine fluid. This case was unusual in that the exudate adhered to the endometrium. The use of NAC was important to assist with the removal of the adherent exudate, and the breakdown of a pathologic biofilm.

Reference