

(43 cases; 5.0% IR). Most common oviductal abnormalities were presumptive blocked oviducts (28 cases; 3.2% IR) and parovarian cysts (10 cases; 1.2% IR). Uterine issues comprised the greatest number of abnormalities, including persistent breeding-induced endometritis (PBIE; 189 cases; 21.9% IR), endometrial cysts (137 cases; 15.9% IR), presence of excessive fluid prior to breeding (78 cases; 9.0% IR) and bacterial endometritis (70 cases; 8.1% IR). Most common abnormalities of the caudal reproductive tract were failure of cervical relaxation (36 cases; 4.2% IR), urovagina (6 cases; 0.7% IR), and poor perineal conformation or tone (13 cases; 1.5% IR). Mammary abnormalities were uncommon, with 3 cases of galactorrhea and 2 cases of mastitis. Most common behavioral issues were stallion-like or aggressive behavior (3 cases), recurrent colic or pain (3 cases) that an owner was associating with the reproductive tract and persistent estrus (2 cases). Issues with a higher incidence in mares > 15 years of age included hemorrhagic anovulatory follicles, uterine cysts, persistent breeding-induced endometritis and bacterial endometritis. Mares with a tight cervix or excessive uterine fluid on initial examination had an increased incidence of PBIE (75 and 39.7%, respectively). In conclusion, persistent breeding-induced endometritis was the most common reproductive abnormality and the incidence of reproductive issues increased with advanced age.

Keywords: Equine, mare, reproductive, problems, pathology

Induction of parturition in a late pregnant mare with large colon displacement

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An 11-year-old multiparous pregnant (324 days) Thoroughbred broodmare was presented to Rhinebeck Equine LLP for treatment of right dorsal displacement of the large colon and associated abdominal discomfort. Mare had minimal mammary

development. No surgical option was available for the mare; foal survival was the owner's priority. Transrectal and transabdominal ultrasonography examinations revealed a viable fetus in anterior longitudinal presentation with a fetal heart rate of 72 bpm (reference range: 80 - 120 bpm). Mare was treated conservatively with isotonic intravenous fluids (lactated Ringer's 1-2 liters/hour) and intravenous flunixin meglumine (1.1 mg/kg twice daily). Dexamethasone (100 mg once daily) was given intramuscularly at days 325, 326, and 327 to stimulate fetal maturation. Induction of parturition was proposed to allow for delivery of a live foal and possible improvement of colonic displacement postpartum. At 328 days of pregnancy the mare's discomfort persisted and colon displacement was unresolved. Induction of parturition using a low-dose oxytocin protocol was elected. Mare was treated intramuscularly with 5 IU oxytocin; after 25 minutes, a vaginal examination confirmed cervical relaxation. Mare was then treated intravenously with 5 IU oxytocin and had behavioral signs consistent with stage I labor. Following an additional 25 minutes interval, the mare was treated intravenously with 5 IU oxytocin. Seventy minutes after the first oxytocin treatment, stage II labor was initiated with spontaneous rupture of the chorioallantois. Duration of stage II labor was 15 minutes, and the mare delivered a live colt with minimal assistance. Complete and grossly normal fetal membranes were passed within 30 minutes. Foal was given 36 ounces of frozen thawed colostrum via nasogastric intubation, and no gross signs of dysmaturity were noted. The colt received intravenous hyperimmunized plasma and was supplemented with stored mare's milk via esophageal feeding tube for 5 days and remained clinically normal. Mare was started on oral domperidone (1.1 mg/kg, once every 12 hours) to promote mammary development. Colic signs ultimately resolved, and both mare and foal were discharged and remained healthy on farm. Elective induction of parturition in the mare is uncommonly performed due to the marked variation in equine pregnancy length and the relatively late ability of the equine fetal adrenal gland to respond to ACTH. The criteria typically used to assess fetal readiness are length of pregnancy, cervical relaxation, and the presence of colostrum within the mammae. This case highlighted the successful use of oxytocin to induce parturition in a mare despite meeting only 1 of the 3 criteria for fetal readiness. Additionally, dexamethasone was utilized to stimulate precocious fetal maturation prior to induction of parturition.

Keywords: Mare, induction, parturition, oxytocin