A case of fescue toxicity in a broodmare
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An 11 year old pregnant mare was presented with prolonged gestation and aglactia. At 362 days of gestation, a transabdominal ultrasound was performed. Fetal heart rate and placental thickness were normal. The mare exhibited poor progression from 338 to 370 days gestation. The primary concern was prolonged gestation and lack of udder development, indicative of fescue toxicosis. Administration of domperidone (1.1mg/kg orally) began on 365 days gestation. On day 371 of gestation, the mare’s mammary gland was engorged and waxing was present. She foaled that afternoon. The placenta prematurely separated and an assisted foaling was required.

After foaling, the mare incompletely expelled her placenta and retained the tip of the non-gravid horn. Treatment for the retained placenta included uterine lavage, administration of oxytocin, and flunixin meglumine. The retained portion of the placenta was retrieved within three hours. Grossly, the placenta was abnormally thickened. Colostrum quality was a concern because of the poor mammary development prior to foaling. Colostrum quality was tested via Brix refractometer at 18%, or “fair” quality. The foal’s IgG level was measured 18 hours after foaling at 673.4 mg/Dl, indicating partial failure of passive transfer. Plasma was administered to the foal and domperidone was continued in the mare for three days to assist milk production.

Fescue toxicity occurs when mares consume endophyte-infested fescue during the last third of gestation. Endophyte infested fescue contains a deferential toxin, ergovaline, that function as a dopamine D2 agonist which decreases prolactin.1 Clinical signs include prolonged gestation length, aglactica, thickened placenta, and weak foals.2 Treatment with a dopamine antagonist, domperidone, has been demonstrated to be effective in decreasing gestation length and increasing milk production.3 This case is important to the study of theriogenology because it documents the importance of proper diagnosis and management of broodmares on fescue during the end of gestation.

References