Can a foal survive ascending placentitis, uterine inertia, fetal maldisposition, neonatal encephalopathy, uroperitoneum and pharyngeal dysfunction with secondary aspiration pneumonia?

L. Rothrock,a R.E. Ellerbrock,a B. Sheahan,b E. Po,a P.A. Wilkins,a I.F. Canissoa
aUniversity of Illinois Urbana-Champaign, Urbana, IL; bNorth Carolina State University, Raleigh, NC

A 23-year-old, multiparous, pregnant Quarter Horse mare (310d) was presented with purulent vulvar discharge and premature mammary gland development. Transrectal ultrasonography revealed placental edema and separation at the cervical star. The mare was treated orally for ascending placentitis (trimethoprim-sulfamethoxazole [TMS] 30mg/kg q12h; flunixin meglumine [FM] 1.1mg/kg q12h 7d, and altrenogest 0.088mg/kg q24h) until delivery. At 340d gestation, the mare had amber colored vaginal discharge without abdominal contractions. Obstetrical evaluation revealed chorioallantois rupture, dilated cervix, absence of uterine contraction consistent with primary uterine inertia, and a fetus in cranial presentation, dorsal iliac position, with bilateral carpal flexion and lateral deviation of the head and neck. Maldisposition was corrected and the foal delivered with assistance. Postpartum maternal care included correction of hypocalcemia and hypomagnesemia with IV lactated Ringer’s solution (+150ml CMPK/10L), pain management FM (1.1mg/kg IV q12h), placentitis treatment TMS (30mg/kg PO q12h), oxytocin (10 units/IM q6h) and episiotomy for correction of abnormal vulvar conformation. The foal required extensive prolonged resuscitation and subsequent intensive care for neonatal encephalopathy, failure of passive transfer (plasma transfusion 2L) and presumed sepsis (cephalexin 30mg/kg PO q8h). On d5, uroperitoneum developed secondary to urachal tear and was surgically corrected. Appropriate mentation and suckle were present on d10, but dysphagia was observed within 24h. On d11, upper airway endoscopy revealed pharyngeal weakness and dysfunction. Thoracic imaging (CT, ultrasonography) and trans-tracheal aspiration results were consistent with aspiration pneumonia and acute respiratory distress syndrome. This resolved with antimicrobial treatment (cephalexin 30mg/kg PO q8h; metronidazole 15mg/kg PO q8h) and prednisolone sodium succinate (0.5mg/kg IV q12h then tapered). The filly was weaned and bucket-fed due to persistent pharyngeal dysfunction. The filly was discharged on d41 and is now a healthy yearling. This case highlights clinical problems associated with high-risk pregnancy, including intra/postpartum complications, resulted in a successful outcome.