Hydrops allantois in a mare with twin pregnancy

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This case is important to theriogenology because it will educate veterinarians on recognizing the clinical presentation of this condition, treating it, and subsequently reestablishing the reproductive health of the patient.

A 15-year old Spotted Racking Mare was presented for severe ventral edema and reluctance to move. The owner suspected that she was exposed to the neighbor’s stallion. Physical examination identified hard and warm bilateral edema extending from the ventral thorax to the inguinal area.

Rectal palpation revealed uterine atony and no palpable fetus. Transabdominal ultrasonography identified hyperechoic fluid in the uterus and severe ventral edema in the abdominal wall musculature. A vaginal examination determined that the cervix was two centimeters dilated. The patient was diagnosed with hydrops of the fetal membranes.

Treatment therapy was initiated by manually dilating the cervix. Five liters of balanced electrolytes in water; 500 mL of calcium borogluconate, magnesium borogluconate, and calcium hypophosphate solution, and 120 mEq of potassium chloride was administered intravenously (IV). Five hundred mg of flunixin meglumine and one gram of prednisilone sodium succinate were also administered IV to decrease the risk of hypovolemic shock. Ninety-four liters of fluid was slowly drained from the uterus using a sterile tube following fluid therapy.

Parturition was induced by administering twenty units of oxytocin IV. Once the amniotic sac became visible, it was manually ruptured. The first foal was delivered in a posterior position. A second foal was then detected. An additional 20 units of oxytocin was administered IV after a brief rest period. Fifteen minutes later, the second foal was manually removed. The umbilical cord was extremely twisted. Each foal was euthanized after birth. The presence of twins and the twisted umbilical cord could have each contributed to the accumulation of fluid that lead to the presentation of hydrops. Balanced electrolytes in water, flunixin meglumine and ceftriaxone sodium were administered for postpartum management. The mare had an uneventful recovery.

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