A novel approach to removing retained fetal membranes in the mare
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A ten year old primparous Arabian X Australian Riding Pony was presented with retained fetal membranes. Physical examination revealed that all vital parameters were within normal limits and a portion of desiccated amnion and the umbilical cord were protruding from the vulva. It was reported that foaling was unattended and that the mare had not been examined between 4 pm and 6 am. The mare was found in a paddock with a foal by her side. The mare and foal were observed on the farm for approximately six to eight hours prior to veterinary examination. The aim of this case report is to describe a novel technique for removal of retained fetal membranes in a mare. The technique was first reported by Dr. Mark Meijer to the remaining authors in March 2014 at the Proveto Equine Conference, the Netherlands. The mare was restrained in a stock, the tail was tied to the side and the perineum was cleaned. The umbilical cord was transected and a single 2cm longitudinal incision was made in an umbilical vessel. A 9mm diameter nasogastric tube (foal tube) was introduced into the incision and fed into the umbilical vessel toward the root of the umbilical attachment on the placenta. The nasogastric tube was attached to a water (garden) hose using a modified garden spray nozzle. Water was continuously infused into the umbilical vessel under low pressure for approximately five minutes. As the umbilical vessel distended, the umbilical cord and nasogastric tube were held tightly by hand to prevent retrograde leakage of water from the umbilical vessels. It appears that the infusion of water induces edema and swelling of the tissue causing separation of the chorioallantois from the endometrium. While water was continuously infused into the vessel, gentle traction was applied to the umbilical cord which facilitated removal of the entire placenta in less than ten minutes. The mare did not demonstrate any signs of discomfort during the procedure. The reproductive tract of the mare was examined using transrectal palpation and ultrasonography for two days after removal of the fetal membranes and no abnormalities were noted. Large volume uterine lavage was performed on the mare for two days. The mare was administered flunixin meglumine (1.1mg/kg, PO, Q24hr) and trimethoprim sulfamethoxazole (30mg/kg, PO, Q12hr) for three and five days after foaling, respectively. The mare was discharged four days after foaling. The mare was served naturally 68 days after removal of the fetal membranes, and she became pregnant. In summary, this novel technique can be easily used in a field setting for successful removal of uncomplicated, retained fetal membranes.

Keywords: Equine, placenta, post-partum