

**Applicant's name:** Sonia Lyn Clinton, RVT

**Case log #** 1

**Date:** 10/04/2011

**Patient ID:** 648

**Species/Breed:** Bovine/Holstein-Friesian **Age:** 3 years **Sex:** Cow **Weight:** 636.36 kg

**Diagnosis:** Cow number 648 had been exhibiting signs of active labor with no progress. After aseptically preparing the patient for a vaginal exam it was determined that she had a uterine torsion. On rectal palpation it was determined that the calf was dead. Because the calf is dead, it is unlikely for labor to progress and for the calf to be delivered naturally. After discussing options, the owner elected for a cesarean section to be performed. Definitive diagnosis is a uterine torsion.

**Treatment Plan:** The uterine torsion is corrected by using vaginal manipulation or a rolling technique. Afterwards, the patient would remain standing and a left paralumbar fossa approach would be used for the cesarean section. The patient would be prepared for surgery by clipping the hair on the left side. The length of surgery site would extend from the 10<sup>th</sup> rib to the most caudal point of the paralumbar fossa. The width of the surgery site would extend from the spine to the ventral aspect of the flank. The patient would be prepared for surgery by clipping then scrubbing the surgery site three times with a *betadine* scrub, followed by providing analgesia by administering 36 ml 2% *lidocain hydrochloride* in a proximal paravertebral block along with a caudal epidural using 5 ml 2% *lidocain hydrochloride*. The surgery site would then be scrubbed three more times using a *chlorhexadine* scrub. Surgery would begin with an incision being made in the caudal third portion of the fossa entering the abdominal cavity. The uterus would then be exteriorized and an incision would be made into the uterus to remove the calf. The RVT would place OB chains around the calf's fetlocks and the calf would be removed from the uterus in an upward-outward motion. Then the RVT would help exteriorize the uterus for removal of the placenta before closing the uterus. Once the uterus is sutured closed, it would be rinsed with two liters of *sterile saline* to help minimize adhesion formation. Next one liter of *sterile saline* infused with 20 ml of *penicillin g procaine 300,000 units* would be administered into the peritoneal cavity. The surgery would be completed once the abdominal muscles are closed in a three layer closure, and skin is sutured closed. After the surgery is completed the patient would receive 500 ml 50% *dextrose solution IV q24h* infused with 80 ml *oxytetracycline hydrochloride 100mg IV q24h*, along with two 1000 ml bottles of 7.2 % *hypertonic saline IV q24h*, 2 ml *oxytocin 20 IU IV qid* for 24 hours, 20 ml *flunixin meglumine 50mg IV q24h*, and 20 ml *dexamethasone 2mg IV q24h*.. The owner should administer follow up care consisting of 25 ml *ampicillin 25g IM q24h* for three consecutive days. Sutures are to be removed in 14 days.

**Advanced skills and procedures performed:** Prepared the patient by clipping the hair and aseptically preparing the surgical site. Removing the calf from the uterus. Exteriorize the uterus and rinsing it. Infusing the peritoneal cavity. Administered the IV fluids, antibiotics, NSAIDS, steroids, and *oxytocin*.

**Advanced skills and procedures assisted:** Assisting with the manual rolling technique to correct the uterine torsion. Restraining the patient for the caudal epidural and proximal paravertebral block.

**Outcome:** The patient had an un-eventful recovery. At 65 days post-operatively the cow was diagnosed ready to breed during rectal palpation. Very few uterine adhesions were felt during the rectal palpation. Finally at 110 days she was confirmed pregnant.