Repairing Uterine Lacerations Due to Dystocia

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What do you do when the uterus is severely lacerated as you correct a dystocia?

In the past in our practice, many of these cases were sent to slaughter. Some cases could be repaired by laparotomy and prolonged nursing care, but this was an expensive and time-consuming procedure. Now we have another option, prolapsing the uterus first and then repairing the laceration, a procedure I picked up from Dr. Maarten Drost from the University of Florida. In my experience with three recent cases, this option results in better prognosis and fewer complications than laparotomy.

Uterine prolapse is initiated by intravenous administration of 10ml of 1:1000 USP epinepherine diluted in 200-250 ml of saline. After administration of the epinepherine, a handful of caruncles is grasped close to the end of the previously gravid horn and gradually pulled into the birth canal. The presence of this mass in the birth canal stimulates straining which leads to the complete prolapse of the uterus. The epinepherine renders the uterus completely flaccid. *(NOTE: This procedure must* ***not*** *be preceded by either administration of oxytocin or epidural anesthesia.)*

The prolapsed uterus is placed on a clean surface. The laceration is debrided as necessary. A gallon of 10% betadine solution or 10 grams of soluable tetracycline dissolved in a gallon of saline can be poured through the laceration into the peritoneal cavity to aid in the prevention of peritonitis and adhesions.

The uterine laceration is sutured with Guard's rumen stitch using No. 2 or 3 chromic catgut. If problems are encountered, a second layer of sutures can be placed. The uterus can then be replaced to its normal position. Antibiotics can be placed in the uterus as indicated. I normally administer 40-50 units of oxytocin immediately after replacing the uterus, and also administer systemic antibiotics for several days.

Another key to the success of this procedure is suturing of the vulva after the prolapse is reduced. I have been using a suture technique described by Dr. Lamp of Bellville, Texas that appeared in VM/SAC March, 1981. With this technique you take a 6 inch needle threaded with 30 inches of 3/8 umbilical tape. The needle is inserted into the skin at the hair line 1 to 2 inches below the dorsal commissure of the vulva. It is passed through the skin, into the vestibule of the vagina, and brought out through the skin on the other side. The umbilical tape is pulled through so that the ends are the same length on each side of the vulva. The needle is cut from the tape and the procedure is repeated about 2 inches above the ventral commissure of the vulva.

The ends of the umbilical tape are tied with square knots on one side around the retention tube. The procedure is repeated on the other side of the vulva and the rods are pulled snugly together. To make certain the rods are not too tight, two fingers are pressed into the labia of the vulva. The sutures are then tied with a bow so they can be removed the next day to check the uterus and repeat medication.

The owner is advised to watch for any signs that stitches have become too tight.

Recommendations for Leptospirosis Problem Herds

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I. Heifers

A. Start a vaccination program on young heifers 3-4 month of age before any exposure. They should receive several boosters before they are bred. If they are exposed before they are vaccinated they may become carriers for life.

II. Water

A. Clean water troughs at least once a month.
B. Chlorinate the animals' drinking water if not fresh water.
C. Fence all reservoirs and creeks to prevent animal access.
D. Place a barrier around troughs to prevent urine and fecal contamination of the drinking water.

III. Vaccinations

A. Vaccinate entire herd at one time so that all animals are protected equally.
B. I recommend repeating vaccinations at 3 mo. intervals.
C. In herds using natural service for problem cows, I am recommending a vibrio-lepto vaccine at the post-partum exam. In some herds I booster these cows again when diagnosed pregnant with vibrio-lepto.