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.

IV. Try and determine the species of Lepto involved

A. Grippotyphosa, Canicola, and Icterohaemorrhagiae—the primary sources are: small carnivores, rodents, wildlife or dogs.

B. Hardjo and Pomona—the cow is the primary carrier.

V. Reduce exposure levels

A. Utilize a constant rodent prevention program.

B. Flush alleys only when animals are not present.

C. Treat all dry cows with 25mg/kg streptomycin at drying off.

Abstracts

An outbreak of rabies in north-western Zimbabwe 1980 to 1983

D. J. Kennedy

Veterinary Record (1988) **122**, 129-133

The first case of rabies for 25 years was recorded in the Chinhoyi veterinary region of north-western Zimbabwe in September 1980. An epidemic in jackals (86 per cent of cases) with associated cases in cattle (7 per cent) spread rapidly north-westward through the commercial farming areas. Within 18 months the front had moved 180 km from the probable point of entry of the disease. One case was diagnosed a further 30 km to the north-west. Following a comparatively quiet period in 1982 a second epidemic developed in dogs and spread back 100 km south-eastward during the second half of 1983. Epidemiological factors, the behavioural features of cases and the ownership and vaccination status of dogs are reported. Dogs were a more serious threat to human beings than jackals and the only two known human cases occurred in late 1983. Factors contributing to the patterns of the epidemics are illustrated and discussed.

A survey of abomasal ulceration in veal calves

D. de B. Welchman, G. N. Baust

Veterinary Record (1987) **121**, 586-590

Abomasal ulceration was found in 264 of 304 commercially reared veal calves at slaughter. The incidence and severity of lesions were greatest in loose housed calves with access to straw and fed milk substitute ad libitum. The majority of lesions were located in the distal pylorus. There was no evidence that the abomasal erosions and ulcers found in the majority of veal calves affected their growth rate or were deleterious to their welfare. It is suggested that pyloric ulceration may be related to the diet of veal calves.

Mucosal changes associated with abomasal ulceration in veal calves

G. R. Pearson, D. de B. Welchman, M. Wells

Veterinary Record (1987) **121**, 557-559

The pyloric region of the abomasum of nine calves reared for veal and four conventionally reared calves aged from 12 to 18 weeks was examined. An increase in the depth of the mucosa with a loss of mucins in the region of erosions and ulcers was observed in the calves reared for veal. In the adjacent mucosa there was an increase in sulphated mucins in five of the seven veal calves with lesions. Focal areas of mucin loss without evidence of erosion or ulceration were recognised in one calf reared for veal and one conventionally reared calf.

Preventive anthelmintic treatment of grazing young cattle via supplementary feed and drinking water

R. J. Jørgensen, P. Nansen, N. Midtgaard, J. Monrad

Veterinary Record (1987) **121**, 468-471

Twenty-six first season calves were allocated into four groups which were turned out on May 21 to graze separate permanent pastures. One group (group A) remained untreated. The others were treated each month with albendazole either as an oral drench (group B) through supplementary feed (group C) or through the drinking water (group D). Neither clinical disease nor weight gain depressions were observed in any group. Although the infection levels were low, the faecal excretion of trichostrongylus eggs, the serum pepsinogen activities and the pasture larval contamination all indicated a marked reduction in the levels of infection of groups B, C and D. The serum pepsinogen activities of groups B and C were similar and remained below 1 unit of tyrosine/litre of serum whereas that of group D was intermediate between these two groups and group A. The labour saving principle which was applied to group C is recommended under conditions similar to those of the present experiment.