The Indian Journal of Animal Reproduction; 27 (2): 89-90; Dec. 2006

Short Communication

Subtotal hysterectomy of ischemic uterus during caesarean section in buffaloes

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Received : January 4, 2005
Accepted : January 10, 2006

ABSTRACT

Eight cases of ischemic/ necrosed uterus were detected during caesarean operation in buffaloes. Zone of ischemia was identified and quantified clinically in the gravid uterus during the operation. The percentage of ischemia / necrosis of the uterine bed ranged between 10 and 25%. After the manual removal of the dead foetus the portion of ischemic or necrosed uterus was excised along with the portion of peripheral healthy tissues of the gravid horn. Caesarean wound were closed routinely. One buffalo died but the other seven recovered uneventfully.

Key words: Buffalo, dystocia, ischemia, uterus, subtotal/ partial hysterectomy.

Uterine torsion is usually defined as the revolution or twisting of the uterus on its long axis (Roberts, 1971). Most cases of uterine torsion occur at the time of parturition or during the last month of pregnancy. The direction of torsion in the buffalo in more than 90% cases is towards right side (Noakes *et al.*, 2001).

Eight buffaloes aged between 7 to 11 years were referred to Veterinary Teaching Hospital, Pantnagar with history of failure of parturition after intermittent abdominal straining. The owner reported after 2 to 4 days of cessation of straining.

Animals were anorectic since last 2-3 days. Clinical examination revealed low body temperature (99° to 99.6°F), rapid pulse rate, and increased respiration rate in all the buffaloes. Per-vaginal examinations indicated stenosis of vagina and vaginal walls were spirally folded forward and downward to the right. Since the cephalic portion of vagina was twisted and hand could not reached up to cervix. Per-rectal examinations revealed strong pulling of right broad ligament downward and under the twisted uterine body. All cases were diagnosed as right uterine torsion of about 270° and more. Schaffer's method was applied after administration of 5 liters of DNS (5%), iv and 20 mg of dexamethasone, iv but failed to correct the torsion after repeated rolling. Further it was decided to go for caesarian operation in all the buffaloes. The site of operation was prepared for aseptic surgery and 2% lignocaine hydrochloride was infiltered locally, in the form of inverted 'L' block at the left paralumber fossa just behind 13th rib. Incision was given on skin followed by fascia, muscle, peritoneum and a dead and emphysematous foetus was removed from the uterus. Zone of ischemia was identified and quantified clinically in the gravid uterus during the operation. The percentage of ischemia / necrosis of the uterine bed ranged between 10 and 25%. All necrosed portions were excised and removed along with a zone of healthy peripheral tissue of gravid uterine horn to prevent the development of toxemia. Then torsion was corrected by rotating the uterus in the left side followed by per-vaginal examination. 2 gm of Dicristycin (Strepto-penicillin) was placed inside the uterus and sutured with double layer of Lambert suture by using chromic catgut No. 2. The peritoneum, muscles, and skin were sutured in routine manner. Daily post-operative

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Table 1: Area of ischemia/ necrosis (%) of gravid uterine horn in cases of uterine torsion in buffaloes.

Case No.	Age	Parity	Side & degree of Uterine Torsion	Area of Ischemia / Necrosis of the Gravid Uterine Horn (%)	Result
1	7 years	3rd	Right side (360^0)	20 % (Right horn)	Survived
2	8 years & 6 months	3rd	Right side (270^0)	10 % (Right horn)	Survived
3	9 years	4th	Right side (360^0)	25 % (Right horn)	Survived
4	10 years	5th	Right side (270^0)	20 % (Right horn)	Survived
5	9 years	5th	Right side (270^0)	20 % (Right horn)	Died
6	11 years & 4 months	6th	Right side (360^0)	25% (Right horn)	Survived
7	10 years	5th	Right side (360^0)	20 % (Right horn)	Survived

dressing of skin suture with Betadine lotion, parenteral fluid therapy and calcium therapy (iv) for two days, Strepto-penicillin (2.5 gm, morning and evening, im) for six days, Diclofenac sodium (15 ml, daily, im) for five days, Avil (10 ml, daily, im) for five days and Beekom-L (10 ml, daily, im) for seven days were administered. Out of eight animals seven were recovered and sutures were removed on day 10-12 post-operation. One animal died 3rd day after operation probably because of their poor physical condition and toxemia.Santschi and Slone (1994) had reported partial hysterectomy in two mares for success termination of pregnancy.

Partial or subtotal hysterectomy may be adopted in protracted obstetrical cases in buffaloes having ischemic/ necrosed uterus. Histochemical detection of the necrosed myometrium especially with fluorescent dye may be helpful for inoperative detection of necrotic uterine tissue vis-à-vis its surgical repair may save critically ill obstetrical patients.

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