

## Uterine torsion in Buffaloes

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### INTRODUCTION

Torsion of uterus has been defined as the twisting of the uterus on its longitudinal axis. Uterine torsion is the largest cause of maternal dystocia in referral cases with incidence ranging from 52 to 70%. The exact etiology of a higher incidence of uterine torsion in buffalo continues to remain unexplained. The horn may rotate to its right (clock-wise) or left side (anti-clockwise) with degree of rotation varying between 90° to 720°. Uterine torsion can be caudal to the cervix (post-cervical) or just cranial to the cervix (pre-cervical). Post-cervical uterine torsion is common in buffaloes (87-99%) and it affects buffaloes mostly towards terminal gestation.

### Predisposition factors:

- ✓ Unstable anatomical attachment of the broad ligaments
- ✓ Poorly developed muscles in broad ligaments
- ✓ Sudden fall
- ✓ Sudden push from other animal
- ✓ Bumpy movements during transportation
- ✓ Hormonal imbalance
- ✓ Calf birth weight and sex
- ✓ Reduced amount of the amniotic fluid
- ✓ Fetal movements in the late first stage of parturition

### Clinical diagnosis

History and clinical signs: The usual clinical signs are the onset of labor without delivery of fetus and/or fetal membranes and later regression of parturition signs in animal. The animal may exhibit tachycardia, tachypnoea, restlessness, partial anorexia.

Per vaginal Examination: Post-cervical torsions can be easily diagnosed by vaginal examination.

Per Rectal Examination: In normal pregnant animal, the broad ligaments can be palpated on the sides of uterus, whereas in pre-cervical (and post-cervical) torsion, the orientation of broad ligaments is altered and these can be felt by crossed and twisted uterus.

**Treatment**

**Rotation of the fetus:** Rotation of the fetus per vaginum is possible only in mild degrees of torsion where the obstetricians hand can touch the fetus and sufficient fluids are present in the uterus. The fetus is grasped by a bony prominence such as elbow, sternum or thigh and swung from side to side before being pushed right over in the opposite direction of torsion. If both fetal limbs are palpable they can be tied in the cuffs of Caemmerer's torsion fork or a Kuenhs crutch and an assistant can rotate them.

**Rolling of the dam:** Rolling is indicated if the dam is recumbent, the fetus is not approachable due to the severity of torsion, or if the torsion has occurred before the expected time of parturition. In Schaffer's

method, dam is rotated to the same degree and direction to which the uterus has rotated, keeping the fetus fixed by fixing uterus with a plank. In Sharma's modified Schaffer's method more pressure is put on the free end of the plank that is being modulated by an assistant and it results in a better detorsion compared to Schaffer's method.

**Laparohysterotomy:** It is suggested in cases of uterine torsion when detorsion by rolling fails or in long standing cases where fetus is dead and uterine adhesions/ruptures are suspected. The prognosis of a caesarean when the fetus is dead and emphysematous is guarded and it is advisable to take care of the patient for the general condition before deciding to operate.