Uterine torsion in domestic animals

Prof G N Purohit
Head Department of Veterinary Gynecology and Obstetrics
College of Veterinary and Animal Sciences, RAJUVAS, Bikaner, Rajasthan, India
**Uterine torsion** (Common in buffaloes and cows, less common in goats, mares)

Uterine torsion is the twisting of a pregnant uterine horn on its own axis

Uterine torsion can occur during mid to late gestation yet it is common during the parturition period in cattle and buffaloes
**Predisposing factors:** Hilly tracts, wallowing habits
1. Uterus has no stabilizing structures during mid to late gestation
2. Fusion of amnion to allantois and of the allantois to the uterus
3. Lowering of fore legs when lying down
4. Close confinement

**Etiology:** Inordinate fetal movements during late gestation
   In buffalo broad ligaments small and weak and the abdomen is deep and capacious

**Clinical signs:** Colic, anorexia, twisting of vulvar lips
   Non-progressive second stage labor
Direction of torsion: Right or left (clockwise and anti-clockwise)

Location: Pre-cervical and post cervical

Degree of torsion: 90 degree to 360 degree
**Diagnosis:** Twisting of vaginal mucus membranes on the side of torsion

Rectal palpation: the broad ligament on the side of torsion under the uterus and the ligament of the other side crossed to opposite side and tensed

**Therapy:** General condition of the patient must be monitored first

- Rotation of fetus per vaginum
- Rolling of the cow (sudden)
- Rolling of the cow (slow) with Schaeffer's method using wooden plank
- Laparotomy with manual detorsion
- Laparo hysterotomy
Torsion correction

Rolling

- Casting cow in direction of torsion
- Rolling the cow after placing a plank over paralumbar fossa
The Schaffers method of detorsion of uterus
Uterine torsion in mares

Uterine torsion typically occurs during mid to late gestation in mares and constitutes 5-10% of all obstetric emergencies. Clinical signs include abdominal that may be mistaken for gastrointestinal distress, parturition or abortion.

Most uterine torsion cases reported in late pregnancy are often accompanied by excessive fetal activity in the flank region, recurrent colic, straining, and premature lactation. Abdominal pain is variable and depends on the extent of the torsion. The owner may report signs of restlessness, sweating, anorexia or poor appetite, frequent urination, wide-legged stance in the hind limbs, stretching, looking at the flank, rolling, and kicking at the abdomen.
• General anesthesia using 500 mg of xylazine, 1000-2000 mg of ketamine to a liter of 5% guaifenesin is administered IV to effect at the rate of 1mL/kg/h is suggested before rolling.
• In heavy draft mares rolling might be less effective
• Non-surgical correction is less successful in mares that are near term
Torsion correction mare
Uterine torsion in goat

- History of straining without fetal delivery

- Post cervical uterine torsions can be diagnosed by vaginal twists yet pre-cervical torsions are difficult to be diagnosed
Uterine torsion in the bitch and cat

• Bilateral uterine torsion has been reported in a bitch with cystic endometrial hyperplasia and in non-pregnant bitch. The incidence of uterine torsion in the bitch described in one study was 1.1%. In the cat uterine torsion have been reported during pregnancy and cats suffering with pyometra and metabolic complications.
• The uterine torsion occurs around the longitudinal axis near the bifurcation of the uterus, and thus displaces the other horn, or there is torsion between the bifurcation and tip of the horn. The puppies that remain in utero die due to lack of oxygen and shock. An animal in labor with torsion of the uterus is an absolute emergency. Torsions up to 360° have been seen in the bitch.
• Clinical signs: Intense abdominal pain with or without passage of one or two puppies.
• Abdomen enlarged more on one side
• Correction: Immediate surgical correction
Thank You

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