MUMMIFICATION, MACERATION AND PYOMETRA IN BOVINE

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MUMMIFICATION, MACERATION AND PYOMETRA IN BOVINE
Fetal membranes becomes shrivelled & dried, fluids of allantois, amnion & fetus are resorbed and uterus contracts on fetus and moulds it into a dry, contorted mass leads to death of fetus at middle and last trimester of gestation
HAEMATIC TYPE MUMMIFICATION IN BOVINE

• Semifluid viscous, reddish brown coloured adhesive substance of haematogenous origin accumulate between uterus and chorion, imparting a reddish brown colour to the fetus and fetal membrane.

• If the condition is undiagnosed mummified fetus will remain in the uterus beyond the normal gestation period.

• Fetal Mummification associated with a persistent Corpus Luteum when the parturition abortion mechanism fail to occur.
DIAGNOSIS

- By Rectal Exploration when no sign of approaching parturition are seen.

**MOST STRIKING CLINICAL FEATURES ARE**

- Pregnant uterus relatively small, lacks fluid and contained irregular, inert fetal mass.
- No Cotyledons
- Uterine Artery is small and without Fremitus.
- Ovary containing Corpus Luteum is palpable.
CAUSES OF FETAL MUMMIFICATION

1. Torsion or compression of umbilical cord

2. Genetic Factor
   
   [a] Inherited Endocrine Defects
   
   [b] Autosomal Recessive Genes

3. Torsion of uterus

   All Mummified fetus and uteri when examined and cultured are sterile.
TREATMENT

- Rational approach is to initiate parturition by using PGF$_2$$\alpha$ 25mg intramuscular within 24-48 hrs cervix dilate and remove mummified fetus.
- STILLBOESTROL Inj. May cause cystic degeneration of ovary and subsequent sterility.
- Extrusion of Corpus Luteum manually may do irreparable damage to ovary as it is firmly embedded in ovary.
FETAL MACERATION

• Failure of an aborting fetus to be expelled due to uterine inertia in a dilated cervix.

• Fetus undergoes a gradual bacterial digestion in the uterine fluid by a process described as MACERATION.

• Maceration may occur at any stage of gestation.
CAUSES OF MACERATION

- Uterine Inertia, Improper dilation of cervix.
- Conditions like Trichomoniasis and Vibrosis.
- Maceration associated with Uterine Torsion during Gestation.
DIAGNOSIS OF FETAL MACERTION

- Intermittent straining with a foul, reddish grey vulval discharge.
- On per rectal examination reveal a distended, swollen fetus where fetal bones floating in pus or crepitating against each other.
- Uterine wall will be thick and heavy with a large and hard cervix.

PROGNOSIS

- Grave and future Breeding Life is Questionable.
- Longer the condition existed the greater damage to endometrium and poorer the prognosis.
TREATMENT

- Estradiol 8-10 mg
- Diethylstilbestrol 80-100 mg result cervical relaxation and extraction of fetus.
- With supportive antibiotic therapy can save the reproductive status of dam at early condition.
PYOMETRA IN BOVINE

• A Progressive accumulation of pus in the uterus with a persistent Corpus Luteum or rarely a Luteal Cyst.

• Volume of 1 to 20 liter pus leads to distension of uterus.
ETIOLOGY & PREDISPOSING FACTOR

• As a sequel to chronic Endometritis & Embryonic Death.

• Uterus cease to produce Endogenous Leuteolysin.

• *Trichomonas fetus* and *Corynebacterium pyogenes* infection.
DIAGNOSIS

• No sign of ill health.
• Absence of Cyclical activity and intermittent vaginal discharge.
• On Rectal Exploration uterine horn are enlarged and distended.
TREATMENT

- PGF2 alpha 25 mg intramuscular result regression of Corpus Luteum, dilation of cervix and expulsion of purulent fluid.

- Antibiotic not given intrauterine as no action on pus.

- Lugol’s iodine used alternate day 50 ml intra uterine 0.5-1% along with broad-spectrum antibiotics like Gentamicin 2-4 ml.