Dystocia due to abnormal size of the foetus, uterine displacement including uterine uterine torsion, obstruction or stenosis of birth canal and uterine inertia

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A. Dystocia due to abnormal size of the foetus :

The abnormal size of the foetus occurs generally the following factors:

1. Foetal giantism
2. Excessive size of parts of the foetus
3. Excessive volume of the foetal fluid (Hydrops)
4. Foetal monster
5. Multiple birth (in uniparous animals)

Foetal giantism is generally associated with long hair, hooves, well reputed incisor teeth associated with hydrocephalus causes dystocia due to prolonged gestation. Foetal giantism in ewe occures due to grazing on *veratrum californicum*.

Excessive size of different parts of the foetus occurs due to tumors (melanoma, sarcoma), cystic dilation of hollow or secreting organ; The affected different foetal parts are foetal thyroid, thymus, kidney, cystic dilation of ureter, hydrocephalus and distension of the rumen.

Excessive volume of the foetal fluid occurs due to dropsical condition of the foetus such as Foetal ascitis, Foetal anaserca, oedema of the allanto-chorion, hydropsy of amnion or allantois or both.

Foetal size also increase due to foetal monster. Foetal monster commonly found in cow foetus are schistosomus reflexus, perosomus horridus, perosomus elumbis, achondroplasia and hydrochephalus.

Twinning in uniparous animals causes dystocia due to development of uterine inertia.

B. Dystocia due to uterine displacement :

Factors related to uterine displacement are :

1. Uterine torsion
2. Inguinal or Ventral hernia
3. Rupture of prepubic tendon
4. Vagino-cervico prolapse

Symptoms of uneasy, restlessness, kicking at abdomen, swithching of tail anf intermitent abdominal straining are seen in case 90 to 360 degree uterine torsion. Cesarean operation, rolling of dam, rotation of foetus and uterus through birth canal are certain treatments of uterine torsion.

Tretment of inguinal hernia or ventral hernia are cesarean operation and traction of foetus immediately after 1st stage of labor. Rupture of prepubic tendon also cause ventral hernia. Lubrication with gentle traction is applicable in case of vagino-cervical prolapse.

C. Dystocia due to stenosis or obstruction of birth canal :

Factors related to stenosis and obstruction of birth canal are :

1. Abnormalities or injuries to the pelvic bones
2. Failure of cervix to dilate
3. Stenosis and obstruction of vagina
4. Stenosis or obstruction of vulva or vestibule

Small pelvis or pelvic fracture cause disparity in size of maternal pelvis and size of the foetus. Cesarean or foetotomy is considered as only treatment in this case.

Fibrosis or sclerosis of the cervix cause **failure of cervix** to dilate which occurs due to cervical laceration or uterine or cervical infection. Treatments of fibrosis or sclerosis are :

- Mechanically : applying moderate traction by hands and arms.
- Cesarean operation : in live foetus and when uterus is free from infection.
- Foetotomy : But in small diameter of the cervix it is not possible.
- Injection of pituitrin or oxytocin or dexamithasone.

Stenosis or obstruction of vagina occurs due to :

(a) Tumors like fibromas, lymphomas, leiomyomas,

(b) excesssive fat around the vagina,

(c) perineal hernia ,

(d) persistent wall of the Mullarian duct which compress the vagina.

Treatment :

Treatment of this conditions is :

- Lubrication into vagina and moderate traction of the foetus with repulsion of extra growth cranially

and laterally to pelvic inlet.

Stenosis or obstruction to vulva or vestibule results due to :

(a) chronic disease,

(b) poor nutrition and

(c) heredity cause.

Genital hypoplasia condition occurs due to improper growth of genitalia. Treatment of this condition are :

- Lubrication with moderate traction within 0.5 to 2 hours from onset of dystocia gradually dilate the vulva.
- Episiotomy after epidural anaesthesia or local infiltration at incision site, dorso-laterally on either side of dorsal commissar (“Gill Flirter”) to prevent recto-vaginal laceration.
- Cesarean operation
- Foetotomy is not indicated in stenosis or obstruction of vulva or vestibule.

D. Dystocia due to uterine inertia :

Weakness or absence of uterine contractions in the 1st and 2nd stage labor is uterine inertia.

Types of uterine inertia :

1. Primary uterine inertia
2. Secondary uterine inertia

Causes of primary uterine inertia :

- Uterus fail to contract or response to hormone stimuli during parturition.
- Overdistension of uterus due to foetal giantism, hydrops to foetal membrane or foetal anasarca etc.

Causes of secondary uterine inertia :

- The uterine muscle exhaust and tightly around the foetus.

Treatment :

A.

- Lubrication
- correction of abnormal posture
- moderate traction

B.

- Pituitrin or oxytocin injection