

## INFECTIOUS CAUSES OF DYSTOCIA

What happens when the pregnant uterus or its contents are infected?  
(learn 4 important consequences)

- Any infection or disease affecting the pregnant uterus and its contents may cause:
  1. Abortion,
  2. Uterine inertia,
  3. Fetal death and occasionally
  4. Septic metritis of pregnancy.

## **INFECTIOUS CAUSES OF DYSTOCIA.....continued**

What happens to wall of uterus in severe infection of the uterus?

As a consequence to which what are the 2 important manifestations?

What happens further due to these manifestations?

- In any severe infection of the uterus the uterine wall may lose its tone or ability to contract-a condition resulting in:
  1. Incomplete dilation of the cervix and
  2. Uterine inertia.
- In the later instance the second stage of labor may be abnormally delayed.
- Death of the fetus prior to parturition or premature birth renders
  1. the fetal extremities prone to postural abnormalities, and
  2. may result in a dorso-pubic position of the foetus in the mare.

## **INFECTIOUS CAUSES OF DYSTOCIA.....continued**

Learn the names of conditions which can happen due to uterine disease which then predispose to dystocia.

- The relation of uterine disease and pathology to hydrops of the allantois and edema of the foetus has been cited and may be a cause for uterine inertia and dystocia.

## **INFECTIOUS CAUSES OF DYSTOCIA.....continued**

What are the various modes through which Infection can cause dystocia?

- Infections may be the immediate cause of condition that predispose to dystocia or they may be responsible for chronic uterine damage such as loss of caruncles, or a non functional uterine horn, either of which may result in abortion, uterine inertia, hydrops, torsion, rare transverse pregnancies, and other abnormalities at subsequent pregnancies.

## **INFECTIOUS CAUSES OF DYSTOCIA.....continued**

Learn 4 measures to help control infections that predispose to uterine disease and foetal death.

- To help control infections that predispose to uterine disease and fetal death both the sire and dam should be free of infection at the time of service.
- A proper interval between parturition and service should be observed.
- All practices of hygiene and cleanliness at the time of service, especially in the horse should be observed.
- All known infectious diseases such as brucellosis, leptospirosis, vibriosis, salmonella, viral and other septicemic or infectious diseases should be controlled according to our best knowledge at the present time so that late abortions or premature births, in which dystocia is common, will be kept at a minimum.

## Traumatic Causes of Dystocia

Learn that traumatic causes of dystocia are not common.

Learn 4 important traumatic conditions which predispose to dystocia.

1. Ventral Hernia,
2. Rupture of pre-pubic tendon,
3. Torsion of uterus and
4. Pelvic fractures

How Ventral hernia and rupture of prepubic tendon may predispose to dystocia?

How torsion of uterus may predispose to dystocia?

How fractures of pelvic bones may predispose to dystocia?

- Traumatic causes for dystocia are not common.
- Ventral hernia and rupture of the pre-pubic tendon late in gestation may occur from traumatic causes.
- These injuries predispose to dystocia by rendering the abdominal wall incapable of strong contractions with a resulting inability of the dam to force the fetus through the birth canal.
- Torsion of the uterus may be caused by sudden slipping, falling or rolling in advanced pregnancy.
- This is not the only factor but it is an important one in the etiology of torsion.
- The resulting twisting of the birth passage is a common cause of dystocia in the dairy cow and a less common cause in the other species.
- Fractures of pelvis with secondary deformity and exostoses is seen most commonly in small animals struck by motor vehicles.
- These may result in a stenosis of the birth passage resulting in severe dystocia at parturition.

## MISCELLANEOUS CAUSES OF DYSTOCIA

What are the 3 suspected causes for abnormal posture of foetus causing dystocia?

How deflection of extremities of foetus gets more aggravated with the progression of the 2<sup>nd</sup> stage of parturition?

- The causes of certain minor abnormalities in posture such as flexed knee or lateral deviation of the head and neck, resulting in dystocia with a live foetus and an apparently normal uterus, are difficult to explain except:
  1. As an accidental catching of the nose or foot on the brim of pelvis or in the soft structures of the birth canal during the early stages of parturition.
  2. A degree of uterine inertia or
  3. Disease of the foetus may also be important factors.
  4. As the second stage progresses and more of the foetus enter the birth canal the deflection of the extremity is further increased.

## MISCELLANEOUS CAUSES OF DYSTOCIA

What are other dystocia under miscellaneous causes category?

What is the cause incriminated for transverse presentation of foetus in mare?

What observation raises a doubt on this theory?

- The causes of posterior presentation of the foetus, a relatively common cause for dystocia in uniparous animals have not been satisfactorily explained.
- The exact causes or even satisfactorily theories are not given to explain transverse pregnancies in domestic animals. Previous uterine disease in mares may predispose to transverse pregnancy and dystocia. But bicornual pregnancies in mares with no previous history of uterine disease have also been reported.



**MISCELLANEOUS CAUSES  
OF DYSTOCIA.....continued**

- In multipara a single foetus may be located transversely in the uterine body, with the two ends of its body in separate horns. This might be due to the intrinsic ability of the uterus in polytocous animals to distribute or balance the burden of pregnancy between the two horns.

**MISCELLANEOUS CAUSES  
OF DYSTOCIA.....continued**

- The factors causing only 1 to 3 foetuses to develop in multipara, that normally have 6-10 foetuses, have not been completely explained. It is not known whether this is a hormonal problem, a problem of early death of the embryos, or due to other causes.
- In multipara with only about one-third the normal sized litter the foetuses are often larger than normal due to increased nutrition and uterine room available. This may result in dystocia at parturition.

**MISCELLANEOUS CAUSES  
OF DYSTOCIA.....continued**

- Improper hormone balance of estrogens, progesterone or relaxin, or failure of the uterine muscle to react to oxytocin, or a failure of the normal release of oxytocin may result in delay of the first stage or second stage of parturition, and in uterine inertia.