

2024 Batch- Lecture No. 34

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VAGINO-CERVICAL PROLAPSE

1. Prolapse of the vagina usually involves a prolapse of the floor, the lateral walls and a portion of the roof of the vagina through the vulva with the cervix and uterus moving caudad.
2. Not infrequently the entire vagina and cervix are prolapsed through the vulva.
3. Vagino-cervical prolapse is seen in all species of domestic animals but most commonly in the cow, especially Herefords, and the ewe.
4. It is reported that the incidence of ovine vaginal prolapse to be about 0.5 % but in some flocks this may reach 20 %.
5. In cattle it is observed most often in Herefords and the larger dairy breeds such as Holstein and Brown swiss.
6. In young, brachycephalic dogs prolapse of the vagina at the time of oestrus is fairly common.
7. It is practically unknown in cats.
8. The causes of prolapse of the vagina and cervix are probably multiple.
9. It is observed in the cow most commonly the last 2 to 3 months of gestation when a large amount of estrogenic hormone is being secreted by the placenta.
10. This causes a relaxation of the pelvic ligaments and adjacent structures and an edema and relaxation of the vulva and vulvar sphincter muscles.
11. When the cow lies down the intra-abdominal pressure especially in late pregnancy is transmitted to the flaccid pelvic structures tending to force the relaxed and loosely attached vaginal floor and walls through the vulva.
12. Vesico-genital pouch is the least restraining part of the pelvic structures and when subjected to increased abdominal pressure the bladder and other viscera are forced against the most yielding part the floor of the vagina.
13. Why this condition affects certain cows and not others is not known but it can be theorized that certain cows produce more estrogens and develop a greater relaxation of the pelvic structures earlier in pregnancy.
14. Conformation may favour prolapse.
15. Atony of the reproductive tract and general weakness of the patient has been attributed to prolapse.
16. Prolapse of the vagina may be influenced or due to heredity or genetic factors in Hereford cattle and sheep and Boxer and Bulldogs.
17. Since prolapse of the vagina is observed more commonly in pluripara than primipara, injuries or stretching of the birth passage at the first or subsequent parturitions may predispose to prolapse during following gestation periods.
18. This is probably a very common predisposing cause in older cattle especially if they were immature or poorly grown heifers and required great traction to relieve dystocia occurring at the first parturition.

19. The condition is favoured by close confinement especially in stanchions in which the cow's rear parts project over the gutter and in sheep, especially those confined on lush pastures and carrying twins.
20. It is seen less commonly in pastured cattle.
21. Over-distention of the abdomen or excessive amounts of loose pelvic fat favour the condition by increasing the intra pelvic pressure.
22. These factors are not important unless the pelvic and vulva structure are relaxed enough to allow the vaginal wall to prolapse.
23. In ewes there is a possible hereditary predisposition for prolapse of the vagina in 1 to 8 percent.
24. Condition is also hereditary in cattle. This cause is suspected occasionally in cattle if a dam and her daughter both develop vaginal prolapse.
25. The high incidence of this condition in Hereford cattle may indicate a possible hereditary factor in this breed.
26. The condition is occasionally observed in cattle following parturition. At this time it is often associated with cystic ovaries, another condition characterized by excessive estrogen production.
27. In dogs, especially noted in Boxers and the larger breeds, most cases of vaginal prolapse occur during proestrous and estrus and regress during metestrus, only to recur again at the next estrus. Protrusion of the hypertrophied vaginal mucosa or prolapse may occur. The later is due to heredity, excessive estrogens and their relaxing effect on pelvic and perineal structures, tenesmus, forcible separation of the male before the end of coitus and disproportion in size between the two sexes.
28. In a few instances the ration may play a role in the cause of this condition.
 - i. In swine and occasionally cattle the feeding of moldy corn or barley may cause edema of the vulva, relaxation of pelvic ligaments, tenesmus, and prolapse of the vagina and even the rectum. Young swine and cattle are more often affected. Even barrows showed an enlargement of the prepuce and mammary glands. This condition has been called vulvo-vaginitis and is generally considered to be due to a high estrogen content in the moldy feed.
 - ii. Certain types of legumes such as subterranean clover in Australia may contain a high level of estrogens and produce permanent sterility in ewes due to cystic degeneration of the endometrium, marked mammary growth and development, great enlargement of the bulbo-urethral glands in wethers, uterine inertia and dystocia, as well as a high incidence, 10 to 12 percent, of prolapse of the vagina in non pregnant ewes. The development of vaginal prolapse ceased after removing the ewes from the subterranean clover pastures. Proper fertilization and rotation of pastures to maintain a certain percentage of grasses largely prevented this condition in sheep pastured on this type of clover.
29. The use of stilbiesterol or estrogens in fattening lambs in the United States may produce vaginal prolapse.
30. Once prolapsed of the vagina or cervix has occurred the exposed mucous membranes as well as the vulvar and vestibular mucosa becomes very edematous, inflamed, irritated, infected, and occasionally necrotic.

31. The bladder may prolapse through the vulva within the vaginal floor and continue to fill with urine.
32. These factors tend to prevent the return of the prolapsed structures when the cow rises, and favour tenesmus, or straining, that may lead to prolapse of the cervix and the rectum and to exhaustion.
33. In most cases occurring during the late gestation period after parturition has occurred the symptoms usually cease.
34. There is no relationship between prolapse of the vagina and cervix prior to parturition and prolapsed of the uterus after parturition.
35. Prolapse of the uterus is no more likely to occur when prolapse of the vagina has preceded parturition than in cows not affected.
36. Prolapse of the vagina and cervix will invariably recur and become more severe during subsequent pregnancies.