Ringwomb in Ewes

During parturition, to deliver a healthy lamb, the collagen of the cervix, uterus, vagina and pelvic ligaments must soften to decrease the resistance through the cervix and vagina. Uterine contractions can then expel the lamb(s) through the birth canal. Difficulty during birth (dystocia) can result in hypoxia and traumatic injury to lambs, resulting in perinatal mortality and economic loss for the producer. Caesarean section is the most effective method of delivering a healthy lamb if dystocia occurs.

The term used to describe when the cervix does not dilate during parturition is ringwomb. The specific cause of ringwomb is not known but may be due to a lack of release of hormones involved in softening collagen or a lack of response of the collagen in the cervix to hormonal stimulation. Mineral deficiency, malpresentation, premature lambing, and consumption of feedstuffs that contain estrogen do not cause ringwomb. There is no correlation of ringwomb with breed of sheep, age, and body condition score. But there does appear to be a genetic correlation to ringwomb; the occurrence of ringwomb appears to run within bloodlines and when these bloodlines are inbred, the frequency of ringwomb increases.

Clinical Signs of Ringwomb

Unlike normal ewes, ewes with ringwomb do not isolate themselves or have a decreased appetite during the first-stage of labor. There is no swelling of the vulva, relaxation of the pelvic ligaments, swelling of the vulva or dilation of the cervix. But again, the ewe will require assistance to deliver the dead fetus. Autolysis of the fetus will occur if the ewe is unable to remove them, leading to septicemia and death of the ewe. Ewes found at this critical stage should immediately be administered antibiotics to prevent systemic infection.
Early Dilation Syndrome

Early dilation syndrome (EDS) is similar but considered to be separate from ringwomb. Assistance is required for lambing due to incomplete dilation of the cervix approximately one to two weeks prior to term. If the ewe is left unassisted during lambing, she may be found dead due to uterine prolapse or uterine tears with evisceration. These ewes typically present with placental membranes protruding from the vagina and little or no udder development or sudden blooming of the udder. As with ringwomb, no correlation has been detected with breed, nutrition, or toxicology and early dilation syndrome.

Treatment

If the ewe is left unassisted, the cervix will not dilate, placental membranes will protrude from the vagina and the lamb(s) will die from hypoxia. Ewes that are suspected of ringwomb should be assisted with a caesarean section to deliver healthy lambs.

Although there is a genetic correlation with ringwomb, ewes are generally not affected by ringwomb during consecutive seasons, although consecutive cases have occurred. But, since ringwomb is genetic, to eliminate ringwomb from the herd, it is recommended to cull affected ewes and their female offspring. In addition, to treat ewes with vaginal prolapse, Dr. Mary Gessert, a private practitioner in Wisconsin, suggests using an epidural injection (0.2 cc of 20 mg/ml xyalzine plus 2 cc of 2 % lidocaine), wait ten minutes and place a purse string to secure
the prolapsed vagina. The ewe must be monitored for labor, at which time the purse string is cut to allow delivery of the lamb(s).

Reference


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