

Popular Article

Vaginal Prolapse and its Management in Bovine: An update

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Introduction

Eversion or act of turning inside out of an organ is called prolapse. Vaginal prolapse is a common occurrence in cows and buffaloes and is also encountered in several other domestic animals. Vaginal prolapse is the most commonly seen obstetrical emergency condition suffered in pregnant cows and buffaloes during the last trimester of pregnancy. The incidence is less observed in post calving phases and the least occurrence is seen in non pregnant animals. Severities of cases in prolapse depend upon when the animal with prolapsed genitalia is taken for appropriate management after the condition arises and how promptly and appropriately the treatment is given. In case of the absence of promptness by the owner, the complications may arise leading to premature birth, difficult calving/ parturition, retention of fetal membrane and uterine infections. Animal suffering from a prolapse is seen to have poor future reproductive performance leading to infertility and reduced milk production. The animal keepers suffer huge economic loss.

Etiology of the Vaginal Prolapse

- It could be due to inflammation and irritation of vagina, vaginal tumor, and other external genital infections.
- It is commonly observed when intra-abdominal pressure is increased during advanced pregnancy.
- Deficiency of essential vitamins and minerals in feed and fodder may predispose the condition.
- It has often been seen in animals having poor body conditions.
- Obesity in pregnant cows and buffaloes may predispose to this condition.
- Vaginal prolapse may also be seen in the animal suffering from inflammation of urinary tract.
- Deficiency of calcium and phosphorus during the advanced pregnancy and post partum phases.
- Etiology of vaginal prolapse could be of hereditary origin.
- Hormonal aberrations/ imbalance may lead to vaginal prolapse. Increase in the circulating level of estrogen has a suppressing effect on blood calcium that causes reduced contractility of smooth muscles and relaxation of pelvic ligaments and increased intra-abdominal pressure leads to the condition called prolapse.
- If there is a sudden change in feed and fodder and consumption of moldy ingredients may predispose prolapse of vagina.

- Animals kept under close confinement and lack of exercise to animals predisposes the pregnant and post calved animal to suffer from prolapse.
- Animal tied on a sloppy floor towards the rear portion during pregnancy and during post calving period shown higher incidence of prolapse.



Prolapse of vagina in a cow

Management and treatment

- Treatment of prolapse can be achieved efficiently if the causative factors could be correctly diagnosed but it is not very easy to find out the etiological factors causing prolapse. So, management becomes a very important tool in the treatment of vaginal prolapse. There is no effective and specific treatment for the condition. Vaginal dressing must be done to get rid of foreign particles like sand, straw, hair, and other irritants adhered to the prolapsed mass by washing with a weak antiseptic solution like 1:1000 parts of potassium permanganate. Boric acid, alum water may be used as antiseptic solutions for cleaning the prolapsed mass.
- The condition should be treated as an emergency
- Combination of therapies using hormones, supplementation of minerals, analgesics, antihistaminic drugs are claimed to result effectively.
- Uses of calcium boro-gluconate for the treatment of prolapse in buffaloes and cows have shown effective results. Oral and parenteral administration of calcium helps in recovery.
- Parenteral administration of progesterone has proved promising results, single injection of 500 mg depot progesterone along with daily antiseptic washing of vagina and application of non-irritant antiseptic cream in vagina for 3 to 4 days gives satisfactory response.
- Due to negligence of the owner and miss handling of the prolapsed mass many a times the farmers need to take their animals to a qualified veterinarian
- Epidural anaesthesia, use of analgesics and application of soothing antiseptic solutions after cleaning the prolapse mass using ice or alum water mass should be repositioned or reverted into the position.
- To minimize straining administration of epidural anaesthesia and sedative drugs are used.
- In acute straining vulval sutures using Buhner's method for the retention of vaginal prolapse has to be applied to prevent reoccurrence.
- The owners should monitor the animal after correction or reposition of the prolapsed organ. Rope truss if applied for the prevention or reoccurrence is highly effective.
- The animal must be tied or positioned in such a way that when the animal stands or sits it should be somewhat raised backwardly compared to the cranial portion or the front portion of the animal.
- To heal the wound the animal must be given parenteral antibiotics and inflammatory medicines and local

antiseptic soothing creams should be applied for quick recovery.

- The animal must be fed palatable and laxative feed and fodder. Sudden change in the diet and quality of fodder should be avoided.
- The daily maintenance and production ration should be offered to the pregnant animals in divided dose so that intra-abdominal pressure could be minimized and better digestion ensured.



Rope truss applied in a buffalo

Since prolapse of genitalia in female animals are identified as of hereditary origin, the animal suffering from prolapse should not be bred even if the dam has a high productivity merits.