



Surgical Condition of Udder and Teats in Cows

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Teat and udder affections are common in domestic animals. Early diagnosis and treatment of diseases of teat and udder is very important for maintenance of their health. Surgical conditions of udder and teats are getting much attention now a day as these affects the economy of the farmer. Milk alone contributes around 63% to the total output from livestock. The udder and teats are vulnerable to external trauma or injury because of their anatomical location, increase in size of udder and teats during lactation, faulty methods of milking, repeated trauma to the teat mucosa, injury by teeth of calf, metabolic disturbances at parturition. Any disease condition of udder and teats may prone to mastitis. Surgical affections of the udder and teats may be congenital or acquired as follow:

Congenital

1. Absence of the udder and teat

Is exceedingly rare and only met with in cases of hermaphrodism.

2. Supernumerary or extra teats

This may occur and can be present anywhere on the udder but are most frequently seen on the posterior surface of udder and in-between the teat. They may be functional or nonfunctional. They frequently interfere with free milking process and are objectionable on show animals.

Treatment

Surgical removals of these teats are best in young animals and older cow in dry condition. Infiltrate the base of the teat by means of 2 % Xylocaine as local anesthetic. An elliptical incision is made including the necessary teat. Crush the tissue and the skin is then sutured in an interrupted pattern.

3. Teat spider

This condition is usually due to congenital absence of teat cistern or canal. It can be acquired in cases of injury, tumour or inflammation of mammary tissue resulting in formation of thin or thick membrane, situated either at the base or middle of the teat. This membranous obstruction removed by teat scissor.

4. Teat stenosis (Hard milker)

It is the condition when teat sphincter gets contracted due to repeated trauma resulting in hard milking of teat. During milking one has to apply more force to take the milk out and milk will come out in fine stream.

Treatment

Local infiltration anesthesia or instillation of 5 ml of 2 % xylocain or similar local anesthetic into the teat canal will provide anesthesia. The orifice should be cleansed, antiseptic applied, and the orifice enlarged. The enlarging procedure may be accomplished by inserting of lighty teat knife, ringed teat splitter or still teat bistoury. The opening in the sphincter is maintained at the desired size by inserting a Larson teat tube and leaving it in place for 5-7 days. Milking is accomplished by removing the cap of the tube .

5. Teat leaker (Free milker)

This condition is just reverse of teat stenosis. It can be due to injury or relaxation of teat sphincter. In this case milk will go on leaking and sometimes infection may gain entry leading to mastitis.

Treatment

This condition is treated by injection of 0.25 ml of lugo's iodine around the orifice or scarification and suturing with one or two stitches with monofilament nylon.

Acquired condition

1. Bovine ulcerative mammitis (sore teats)

The teats become painful due to presence of cracks, traumatic injuries, lesions due to disease conditions such as pox, FMD etc. These lesions become ulcers in due course of time and oozing of blood from teat causes contamination of milk.

Treatment

Sterilized teat siphon should be used to drain the milk out. Painful lesions and wound should be washed with light potassium permanganate solution and then soothing preparation such as zinc oxide ointment or antiseptic dressing may be continued till the complete healing of the lesion occurs.

2. Teat laceration and fistulae

The condition is mostly observed in those animals that have long teats and pendulous udder. Teat fistula, refers to an opening in the wall of the teat, connecting the exterior to the pre-existing channel, the teat canal is characterized by persistent outflow of milk. Such fistula may be congenital or acquired. It is mostly acquired as a result of penetrating wound that extend to the teat canal or cistern and fails to heal completely because of the continuous drainage of milk.

Treatment

The cases of teat fistula are considered as emergency because any delay in repair of such teat will cause development of mastitis or necrosis of the teat. For repair of such teat, all aseptic precautions should be taken into considerations. A full coverage of systematic antibiotic is required and for proper drainage Larson's teat plug is used. Different suture techniques are used to repair the teat fistula but double layer simple continuous suturing with vicryl 3/0.

3. Abscess of the Udder

Abscesses of the udder may develop beneath the skin as a result of infection of a haematoma. It may occur in the parenchyma of the udder as a result of chronic mastitis especially in goats. It may also occur as a result of supramammary lymphadenitis. Generally, abscess formations most commonly occurs secondary to the traumatic wound.

Treatment Following confirmation of diagnosis, the treatment should be done on the general principles for treatment of abscesses. If there are multiple abscesses, mastectomy (partial or total) according to the involvement of one quarter or more on the entire

udder, is then indicated. If there is involvement of the supramammary lymph node, lymphadenitis it should be extirpated

4. Lactolith (milk stone)

Milk stone are formed into the teat canal when the milk is rich in minerals and salty in taste due to super saturation of salts. The stone moves freely in teat canal and hinder the milk flow, if large in size. They usually get washed out along with milk but if large in size then it can be crushed with small forceps or cutting the sphincter with teat bistouries and milked out.

5. Teat canal polyp

These are small pea sized growths attached to the wall of teat canal. The polyps hinder the milking process and sometimes even block the passage of teat canal.

Treatment

Teat polyps can easily take out by Huges teat tumour extractor. If its location is above the teat canal thelotomy is the best method for resection of excessive tissue. Postoperative gentamicine and prednisolone infusion for five consecutive days found suitable to check infection as well as helpful in checking further growth of the polyp.

6. Fibrosis of teat canal

This condition is commonly observed in most of the lactating animals where a hard fibrous cord like structure is observed in the teat. Exact cause of this condition is not clear. However, repeated trauma due to mechanical injuries, thumb milking and calf suckling are the main contributory factors. Sometimes mastitis can also result into fibrosis of quarter followed by teat canal. This fibrotic cord will obstruct the teat canal and will create hindrance during milking.

Treatment

In such cases, initially hot water fomentation followed by counter irritant massage such as iodine ointment and turpentine liniment massage is very useful. In some cases it is advisable to place polythene catheter after removal of fibroid mass by Hugs teat tumour extractor.

7. Tumour of mammary gland

1. These are infrequently in lactating animals however, fibro adenoma reported in heifer. The growth can be surgically removed under caudal block or local infiltration analgesia.