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Successful Management of Lactolith (Milk Stone) in a Red Sindhi Cow- A Case Study

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ABSTRACT

Any disease condition of udder and teats not only causes painful milking but also makes udder and teats prone to mastitis. Congenital and acquired surgical conditions of udder and teats can be grouped into the conditions of epithelial surface of udder and teats, conditions of glands and tea cistern or canal and conditions of teat sphincter. The diseases of udder can be congenital anomalies are known at the time of first calving but acquired anomalies can affect any stage of lactation. 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, unintentionally stepped on teat, paralysis resulting from metabolic disturbances at parturition. The present paper describes the case of deposition of milk stone in the udder of a Red Sindhi cow and its successful management along with removal of coagulative milk stone via surgical interventions.

Keywords: *Lactolith, sedation, udder*

INTRODUCTION

Surgical affections of udder affect the financial status of milk farmers.[1] Udder of the animal particularly in bovines is mostly prone to external injury due to their anatomical position in the animal.[2] Due to any extraneous injury if the udder is loaded with any microbial contamination it predisposes to mastitis. And if the condition left untreated, it results in different affections of udder like lactolith, teat spider etc.[3]

CASE HISTORY AND OBSERVATIONS

A 6 year old second calver Red Sindhi was presented at the Teaching Veterinary Clinical Complex (T.V.C.C.) of Arawali Veterinary College, Sikar with the complaint of presence of a hard swollen mass on the left udder.

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On history taking it was revealed that earlier it was suffering from mastitis and was treated by a local para veterinarian. Physical examination revealed presence of a hard swollen mass on the left half of the udder. No milk was coming out from the teats of the left quarter. No letting down of milk even after the passing of the teat siphon. The case was diagnosed to be lactolith and decided to remove the milk stones by surgical intervention.

TREATMENT AND DISCUSSION

The cow was sedated by administering 1.5 ml of Xylazine intra muscularly. The animal was restrained and 10 ml of 2% Lignocaine Hydrochloride at the peripheral region of the udder.Incision was given on the lateral aspect of udder. The subcutaneous fascia was cleared. On further exploration of the udder, hard milk stones are recovered (**Figures 1 & 2)**. The udder was completely evacuated. The udder was flushed with normal saline. The incised site was closed by horizontal mattress using chromic catgut no

2 so that the shape of the udder will not be affected (Figure 3).

Figs. 1 & 2. Opening and evacuation of Lactolith from udder

Fig. 3. Closure of surgical site

Post-operatively, the cow was administered with 4 liters Dextrose solution and Ringer's lactate 3 liters were given on same day with Ceftriazone Tazobactum @ 4.5g and 10 ml Meloxicamintra-muscularly for 6 days respectively. Owner was advised to apply Gentamicin ointment topically twice a day on the surgical site. Complete evacuation of udder was advised for a week. Further recovery of the animal was uneventful.

Milk stones and solidification of milk occur when the milk is rich in minerals particularly calcium and due to super saturation of salts.[4-8] The stone moves freely in teat canal and hinder the milk flow, if large in size. They usually get washed out along with flow, but if large in size then it cannot be crushed with small forceps and gradually milk ceased to come from the udder.[9-12]

CONCLUSION

Successful surgical management of lactolith (milk stone) of a 6 year old Red Sindhi was performed.

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