

## A Study of Chronic Fibrosis of Teat Canal in Bovines Treated with Homeopathy

S.S. Makker<sup>1\*</sup>, S.S. Randhawa and S. Arora<sup>3</sup>

<sup>1</sup>Department of Animal Husbandry, Govt. of Punjab, <sup>2</sup>Director Clinics, GADVASU Ludhiana and <sup>3</sup>Guest Faculty, Dr. B. R. Sur Homeopathic Medical College, Motibagh, New Delhi

### Abstract

Fibrosis of Teat canal is commonly observed in most of the lactating animals where a hard fibrous cord like structure is observed in the teat which ultimately create hindrance during milking. 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. Fibrosed mastitic cattle do not usually respond to conventional antibiotic therapy and the affected teat is ultimately rendered non functional resulting in a considerable economic loss to cattle owners. The present study was therefore undertaken with an objective of evaluating the extent of efficacy of homeopathic treatment in chronic teat fibrosis. This study was conducted under field conditions on One hundred eight (108) out of which 38 were cows and 70 were Buffaloes of variable age and lactation that were suffering from varying degrees of teat fibrosis either diffuse or in form of fibrotic nodules of varying size near the base of teat cistern or tip of the teat or as hard fibrous cord like structure palpated in the teat cistern were selected. Animals were randomly allotted to three groups, A (n=14 Cow, 28 Buff.), B (n=14 Cow, 28 Buff.), and C (n=10 Cow, 14 Buff.), A recovery rate of 64.28% in Cows and 67.85% in Buffaloes in A group and 85.71% in Cows and 89.28% in Buffaloes in B group was achieved following oral administration of Homeopathic medicines, Phellandrium 30C and Carbo Animalis30C for a period of 21 and 42 days in group A and group B respectively. Whereas group C was kept as untreated control. In light of these reports and present observation it can be inferred that combination of homeopathic medicines, Phellandrium and Carbo Animalis can be effectively used in the treatment of Teat fibrosis in mastitis in cows and Buffaloes. Although the course of treatment is protracted yet it is safe and cost effective.

**Key Words:** Phellandrium, Carbo Animalis, Teat fibrosis.

Teat fibrosis, a common sequel of mastitis develops so gradually that it may escape observation until most of the secretory tissues are destroyed. Fibrosis may be diffused, involving whole quarter or local varying in size from pea like lesion to bigger masses near the base or tip of the teat (Blood *et al.*, 2006) or hard stone like swelling in teats. Mastitis is an economically important disease of cows and buffaloes. In India economic losses due to mastitis are estimated at 526 million US dollars annually. Conventional veterinary treatment relies on costly antibiotics; cure rate is only 60% in field conditions with a problem of milk residues.

Fibrosed mastitic cows and buffaloes do not usually respond to conventional antibiotic therapy and the affected quarter is ultimately rendered non functional resulting in a considerable economic loss to cattle owners. The present study was therefore undertaken with an objective of evaluating the extent of efficacy

of homeopathic treatment in chronic Teat Fibrosis in bovines.

### Clinical Observations

The study was conducted under field conditions on hundred eight cows and buffaloes of variable age and lactation. The cows and buffaloes showing varying degrees of fibrosis either diffuse or in form of fibrotic nodules of varying size near the base of teat cistern or tip of the teat or as hard fibrous cord like structure palpated in the teat cistern were selected. All the animals were reportedly treated earlier with conventional allopathic therapy with no improvement. The animals were randomly allotted to three groups. A (n=14 Cow, 28 Buff.) ) 1ml of Phellandrium 30C in 5 ml of Luke warm water was administered orally thrice a day to each animal with help of Syringe directly in Mouth of each Cow and Buffalo. Carbo Animalis-30C was also administered in same dose and route keeping a time gap of half an hour between

\*Corresponding author: dr.ssmaker@gmail.com

**Table: 1 Recovery percentage following treatments of different duration**

Group	No. of Cows Treated	No. of Buffaloes Treated	No. of Cows recovered	No. of buffaloes recovered	Percent recovery in cows	Percent recovery in buffaloes	Duration of Treatment (days)
A.42	14	28	9	19	64.28%	67.85%	21
B.42	14	28	12	25	85.71%	89.28%	42
C.24 (untreated control)	10	14	-	-	-	-	-

two administrations. The treatment was carried out for 21 days. In group B, (n=14 Cow, 28 Buff.) the same treatment regime was continued for 42 days while group C (n=10 Cow, 14 Buff.), did not receive any treatment and served as control. All the animals were examined weekly for signs of recovery up to 60 days. The percent recovery was calculated on the basis of clinical improvement observed following the treatment. The diagnosis of Teat fibrosis and recovery criterion was based on physical examination of teat and milk and certification of the concerned farmer. Bacteriological analysis and somatic cell count were not performed.

A marked response to treatment was observed within a week. Flakes in certain cases started coming out of fibrosed teats on stripping and a complete recovery was achieved in 9 Cows and 19 buffaloes of group A and in 12 Cows and 25 Buffaloes of group B (Table 1). Animals of group C did not show any improvement during the course of trial. Relapsing of the signs was not noticed in any of the recovered cases up to next 30 days. Over all recovery rate of 64.28% in Cows and 67.85% in Buffaloes in A group and 85.71% in Cows and 89.28% in Buffaloes in B group was achieved following oral administration of Homeopathic medicines, Phellandrium 30C and Carbo Animalis 30C for a period of 21 and 42 days in group A and group B, respectively.

## Discussion

Fibrosis of Teat canal 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. In such cases, initially hot water fomentation followed by these two remedies gives us best possible results which were not possible

with conventional therapies.

**Phellandrium:** Unplugged milk ducts. Infection causes pain, swelling, redness, and increased temperature of the udder. It can occur when bacteria, often from the Calf 's mouth, enter a milk duct through a crack in the nipple. This causes an infection and painful inflammation of the udder & teats.

**Carbo Animalis:** is one of the deep-acting, long-acting medicines. Suitable in complaints that come on insidiously, that develop slowly, that become chronic and often malignant in character. Lumps in the mammary glands. A purple lump the size of a hen's egg will form in the mammary gland. It does not go on to suppuration, It does not enlarge much, but it is hard. A gland becomes inflamed, hard and remains so. Carbo animalis stands at the head of the list of remedies that have that condition. Carbo Animalis is useful in the treatment of clotting of the blood inside the veins, and the formation of spider webs on the skin.

## Conclusion

In light of these reports and present observation it can be inferred that combination of homeopathic medicines, Phellandrium and Carbo Animalis can be effectively used in the treatment of Teat fibrosis of mastitic bovines. Although the course of treatment is protracted yet it is safe and cost effective.

## References

- Blood, D.C., Radostits, O.M. and Henderson, J.A. 2006, Veterinary Medicine. English Language Book Society, Bailliere, Tindal 451-81.
- Chandel, B.S., Dadawala, A.I., Chauhan, H.S., Parsani, H.R. and Pankaj Kumar 2009. Efficacy of a Homeopathic Complex and Antibiotics in treatment of clinical mastitis in North Gujrat. *Veterinary World*. Vol 2(10) :383-84

- Day, C.E.I, 1992 . Alternative Medicine, In Bovine Medicine, First Edn. p. 889-96
- Edwad, H.R. (2002). Homeopathic Veterinary Medicine, B . Jain Publishers (P ) Ltd. New Delhi . P 26-41
- Shah, M. A (2003). Silicea and Foreign body, Homeo Medical Times Vol. **8**: 59 Upadhyay, A.K 19:65-67 and Sharma, S.P, 1999. Management of Bovine by Homeopathy. *Indian Vet. Med. Jour.* Vol **30**:71-72
- Upadhyay, A.K., Rajora, V.S. Pachauri, S.P. and Gupta, G.C. 1995 Evaluation of Homeopathic Drugs in Bovine Mastitis. *Indian Vet. Med. Jour.* Vol. **19**: 65-67

*Received : 13.12.2022*

*Accepted : 28.06.2023*