

PAPILLOMATOSIS IN JERSEY COWS AND ITS DIFFERENT MEDICAL TREATMENT

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Abstract: Papillomas (or) Warts are the finger like projections, it may be isolated or multiple and originate from the skin surface of the teat. The study was conducted on 24 Jersey cows in Erode District of Tamilnadu. The purpose of study is to determine the cure rate of papillomatosis after four weeks under different therapy. Autohaemotherapy were found to be most effective with a cure rate 92% followed by anthiomaline (81%), oral administration of thuja extract (70%) and topical application of thuja ointment (57%).

Keywords: Papillomatosis, Jersey cow, Autohaemotherapy, Anthiomaline and Thuja.

Introduction

Papillomas (or) Warts are the finger like projections, it may be isolated or multiple and originate from the skin surface of the teat. Usually the warts do not interfere in milking but when ulcerated (or) cracked it may cause pain (Tyagi and Jit Singh, 1996). Bovine Papilloma virus (BPV) is a group of DNA viruses of the family *Papillomaviridae* are the cause of papilloma and warts in cattle. Six types of BPV have been characterized, of which BPV-1 cause frond fibropapilloma of udder and teat, BPV-5 cause rice grain fibropapilloma of udder and BPV-6 cause frond epithelial papilloma of the bovine udder and teat. In older cattle, papillomas are usually confined to the udder and teat and the spread between animals is through teacup liners and milkers' hand (Ohnstad et al., 2007). There is a wealth of anecdotal evidence that the areas close to low lying river plains and forests are more prone to warts (Ohnstad et al., 2007). Sharma et al., (2005) reported that occurrence of papillomas were higher in advanced stage of lactation and the maximum lesions were observed in winter season (37.78%) followed by autumn (33.33%), summer (20.00%) and spring (8.89%) and also quoted the reason for fewer lesions during summer and spring could be better teat skin condition in warm months. The teat skin lesions mostly involved only one teat (68.89%)

followed by involvement of four (17.78%), two (11.11%) and three teats (2.22%) and 6.67% lesions were concurrently present on the udder. The present article reports the curative rate of papillomatosis of udder and teat in a Jersey cow under different therapy.

Materials and Methods

A. Animals: Our study population consisted of 24 Jersey cows at Erode District of Tamilnadu and aged 6-8 years.

B. Clinical examination: On clinical examination body temperature, respiration rate, heart rate was in the normal range for 24 Jersey cows and numerous filiform projection like growth were noticed on the udder and teat region.

C. Treatment of Papillomatosis: 24 Jersey cows were divided into four groups and treated by different therapy.

1. Group 1(6 cows) treated by anthiomaline, each ml of anthiomaline contains 60mg of Lithium Antimony thiomaliate.15ml/dose, given by i.m at 48 hours interval for four weeks.
2. Group 2(6 cows) treated by topical application of thuja ointment, thrice a day for four weeks.
3. Group 3(6 cows) treated by oral administration of thuja extract 20gm, thrice a day for four weeks.
4. Group 4(6 cows) treated by autohaemotherapy. Accordingly the cow was treated using its own blood.20ml of venous blood was drawn from the Jugular vein using 18G hypodermic needle in a disposable syringe. Each 10ml of it was injected both the sides of the lateral neck region by taking all sterile precautions. The treatment was repeated at weekly interval for four weeks continuously

Results and Discussion

The study revealed that the highest occurrence of papillomatosis of udder and teat were in pluriparous animals. The findings go along with Sharma et al., (2005) who reported that the papillomas of udder and teat were higher in pluriparous buffaloes.

Table 1. Cure rate of Papillomatosis of udder and teat under different therapy

No. of Jersey cows examined	Cure rate of Papillomatosis of udder and teat under different therapy after four weeks			
	Group 1 (anthiomaline)	Group 2 (topical application of thuja ointment)	Group 3 (oral administration of thuja extract 20gm)	Group 4 (autohaemotherapy)
24 Jersey cows (6 Jersey cows in each group)	81%	57%	70%	92%

The data in Table 1 showed that autohaemotherapy were found to be most effective therapy to cure papillomatosis of udder and teat in Jersey cows within four weeks with a cure rate 92% followed by anthiomaline (81%), oral administration of thuja extract (70%) and topical application of thuja ointment (57%). In autohaemotherapy after fourth injection, the papilloma growths showed signs of regression. The findings were in accordance with those of Ganesh Hedge (2011) treated cutaneous papillomatosis in a non-descript cow by autohaemotherapy and Chetan Kumar. G.K (2011) use autohaemotherapy for the treatment of Bovine papilloma. The findings of this study revealed that without using any chemical agent, autohaemotherapy can be effectively employed to treat papillomatosis of udder and teat in a Jersey cow and the animal get rid of papillomatosis within four weeks.

Conclusion

The study revealed that autohaemotherapy were found to be most effective therapy to cure papillomatosis of udder and teat in Jersey cows and the animal get rid of papillomatosis within four weeks.

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