

Ethnomedicinal Treatment for Blindness in Bovine

Umakanthan T^{1*}, Madhu Mathi P², Umadevi U³¹Veterinary Surgeon, Durairajapuram Colony, Anaikaripatty (Post), Bodinayakanur (Taluk), Theni (Dt.), Tamil Nadu, India²Veterinary Surgeon, Vadakupudhu palayam, Kodumudi (Taluk), Erode (Dt), Tamilnadu, India³Assistant Professor, Department of Botany, the Standard Fireworks Rajaratnam College for Women, Sivakasi, Virudhunagar (Dt), Tamil Nadu, IndiaDOI: [10.36347/sjavs.2020.v07i08.006](https://doi.org/10.36347/sjavs.2020.v07i08.006)

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*Corresponding author: Umakanthan T

Abstract

Original Research Article

Thirty bovine cases of blindness due to various etiologies are studied giving ethno-medicinal therapy. Clinical examination of the presented cases revealed partial to complete lack of vision, of which some are known affected with listeriosis. Group A of 4 animals given no treatment. Group B of 4 animals were treated with vitamin A and multi-vitamin injections daily. Both groups recorded no improvement in vision. Group C of 26 animals were sublingually applied the fine-ground paste made of *Datura innoxia*, *Acorus calamus*, *Allium sativum*, common salt and cow butter, for 7 to 15 days once daily. Eventually recovery recorded in 20 animals of group C and thus the effectivity was found to be 92%.

Keywords: Bovine, blindness, vitamins, alternative medicine treatment.

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INTRODUCTION

Blindness, inability to see, is a common condition which poses major problem in domestic animals, especially cattle. Even after a successful specific therapy for a specific disease which has blindness as one of the symptoms, the blindness usually not responding but persists. Though the disease/causative-specific treatment is given and the animal got to recover, blindness can still persist. It hugely defers the value of the animal. Thus an effective field applicable treatment using ethno-medicinal formulation was tried and presented in this paper.

MATERIAL AND METHOD

Thirty four cases of blindness were studied, including listeriosis. The animals were presented for unsteady walk, striking upon walls, problem following the owner and feeding, along with the disease-specific other symptoms. Clinical examination revealed wobbling gait, and mere absence of menace, palpebral reflex and corneal reflex, with conjunctivitis in some cases. Treatment method for such partial to complete blindness was tried as below.

Group A of 4 cattle kept as control with no treatment. Group B of 4 cattle were given recommended dose of Advel-A (vitamin A–Morvel laboratories) and multi-vitamin injections daily for 15 days.

Group C of 26 cattle were sublingually applied with the finely ground paste consisting of *Datura innoxia* (downy thorn-apple) 10gm, *Acorus calamus* (sweet flag) 10gm, *Allium sativum* (garlic) 10gm, common salt 10gm and cow butter 10gm, for 7 to 15 days once daily.

RESULT AND DISCUSSION

No sign of improvement in vision noticed in group A. One animal of group B and 20 animals of group C showed good vision at the end of 15-day treatment.

Blindness is a customary sequel of many diseases/ conditions like listeriosis, infectious bovine keratoconjunctivitis, etc occurring in cattle, but often goes unnoticed and uncared. Even after the animal recovers from affected cause, blindness still persists and indirectly affects the animal's integral merit. In some cases blindness occurs without any specific cause and this also post a check on treatment for blindness. But it is needed to be cared of ethically considering the animal's welfare, as well as its productivity.

Hence general treatment using allopathic supplement of vitamins and ethno-medicinal formulation are comparatively studied.

Since blindness due to vitamin A deficiency is the most prevalent [1], one group were given vitamin supplements.

Therapeutic action of the ingredients used in this study is

- *Datura innoxia* have been used to obtain visions [2].
- Sweet flag was one used for treating eye diseases, and thus its generic name, *Acorus* is derived from the Greek word *akore*, meaning 'without pupil'. The specific name comes from the Arabic *kalon*, and means 'reed', referring to the iris or flag-like foliage [3].
- *Allium sativum*, garlic, was supposed to improve eyesight. When cattle lost their vision, farmers hung roots of it about their necks [4].
- Common salt, sodium chloride, its importance in cattle diet is recognized for thousands of years. It provides palatability and the cattle will voluntarily consume far more than enough [5].
- Cow butter has vitamin A varying between 200-2000 microgram/ 100gram. Only cow's milk contains 6.0 microgram carotenes which are converted to vitamin A in the body [6].

The above ingredients were combined in a specific proportion and employed for treating the blindness. Eventually the successful refinement is recorded.

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Conflict of interest

The author(s) declare(s) that there is no conflict of interest.

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