

RESEARCH ARTICLE

EUTHANASIA OF ACUTE NEUROLOGIC CANINE DISTEMPER VIRUS AFFECTED PET DOG ADJACENT TO PROTECTED FOREST AREA

Vimalraj Padayatchiar Govindan^{a*}, Parag Madhukar Dhakate^b, Ayush Uniyal^a

^a M.V.Sc., (Wildlife Science) Wildlife Veterinary Officer Uttarakhand Forest Department, Western Circle, Haldwani, Uttarakhand, India.

^b Conservator of Forest, Uttarakhand Forest Department, Haldwani, Uttarakhand, India.

*Corresponding Author Email: vemalrajpg@gmail.com

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ABSTRACT

Adult male non-descript bred dog presented with a history of circling motion, frequent head nodding, crusty muzzle, muscle twitching, seizure, vomiting, inappetence, coughing, inability to walk, watery pustular discharge from eyes and blood stained left ears and on further examination of foot pads showed thick, crusty or hardened sole and based on the clinical signs and symptoms, provisionally diagnosed as Canine distemper and advised euthanasia due to close geographic onset of the disease epidemic and to prevent Canine distemper-associated deaths in wild canids and felids.

KEYWORDS

Canine, Muscle twitch, Seizures, Distemper and Hyperkeratosis.

1. INTRODUCTION

Canine distemper is a contagious and serious virus that attacks the respiratory, gastrointestinal and nervous systems of puppies and dogs. The virus can also be found in wildlife such as foxes, wolves, coyotes, raccoons, skunks, mink and ferrets and has been reported in lions, tigers, leopards and other wild cats as well as seals. Most often become infected through airborne exposure (through sneezing or coughing) to the virus from an infected dog or wild animal (Feng et al., 2016; Gordon et al., 2015). Shared food, water bowls and equipment can also transmit the virus. Infected dogs can shed the virus for months, and mother dogs can pass the virus through the placenta to their puppies (American Veterinary Medical Association, 2019). Euthanasia of pets has been described as “the best and the worst” of the profession. Euthanasia is the term used to describe ending the life of an animal in a way that minimizes or eliminates pain and distress and the way an animal dies is an important aspect of its welfare. The principle is to protect animal lives on one hand and to reduce pain on other hand (Caffrey et al., 2011; Passantino et al., 2012). The aim of the study was to document euthanasia, the effect of canine distemper and importance of vaccination.

2. RESULT AND DISCUSSION

An adult male non-descript bred dog with a history of circling motion, frequent head nodding, crusty muzzle, muscle twitching, seizure, vomiting, high temperature, inappetence, coughing, inability to walk, cloudy watery discharge from eyes and blood stained left ears, foot pads with rusty or hardened and partial visibility was documented in a village on the brinks of a Corbett Tiger Reserve, Nainital District of Uttarakhand.

Euthanasia was advised and explained the cause effects and then practiced using Xylazine Hcl @ 3ml i/m, Ketamine Hcl @ 2ml i/m and followed by intra venous infusion of Thiopentone Sodium @ 12ml and in less than two minute the dog collapsed without any struggling or bark (Animal Welfare Board of India, 2013). Confirmation of death included lack of pulse, breathing, corneal reflex, failure of a response to firm toe pinch, graying of mucus membranes, and an inability to auscultate respiratory or heart sounds suggestive of cardiac arrest (American Veterinary Medical Association, 2020).

Loss of a pet may be stressful to the owner, but euthanasia is the appropriate choice whenever the above conditions can be met. Limited treatment options due to financial constraints and owner not wishing to continue treatment of terminally ill animal (Hartnack et al., 2016). Proper disposal of carcass remains most important for many reasons. Presently, choices for disposal of carcasses were burial, a common method of carcass disposal and regulated by local laws and ordinances (Shearer, 2018; Cleaveland et al., 2001).

3. CONCLUSION

Domestic dogs were considered the likely source of infection for canine distemper among the domestic population including wild animals and suggest that surveillance and vaccination among all domestic and stray dogs are advisable. Euthanasia is sometimes the only solution for relief from uncontrollable pain and distress, Infected dog must be euthanized humanely and in the current study, necessary action done to prevent transmission from domestic to wild animals and further genomic sequencing of Canine Distemper Virus in future need to be studied in detail.

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CONFLICT OF INTEREST

There is no conflict of interest.



Figure 1: Dried Pustular eyes



Figure 2: Nasal Hyperkeratosis



Figure 3: Footpad Hyperkeratosis



Figure 4: Watery Blood discharge from ears

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