



Management of Canine Oral Papillomatosis using Homeopathic Medication

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Abstract

A four and a half year old crossbred male dog was presented with several cauliflower like growth on oral mucosa that progressively developed over a period of one month. These growths were grayish-white in colour and were diagnosed as canine oral papillomatosis based on clinical examination. Earlier treatment with Azithromycin orally, autoimmune therapy, topical application of imiquimod cream and injections of lithium antimony thiomalate proved to be ineffective. Later topical application of *Hydrastis canadensis* and *Calendula officinalis* homeopathic mother tincture proved effective in treating the condition..

Keywords: Canine Oral Papillomatosis; Homeopathic; *Hydrastis canadensis*; *Calendula officinalis*

Introduction

Canine oral papillomavirus consists of a group having eight viruses, which are represented by CPV-1 to CPV-8. Among these viruses, CPV-1 is responsible for causing canine oral papillomatosis in young dogs [1]. The Papillomavirus is a DNA virus that has special affinity towards the cutaneous squamous or mucosal epithelium [2]. Dogs of <4 years old are commonly affected and there is no difference in the prevalence of COP among different breeds of dogs with no gender predisposition [3]. It is typically characterized by cauliflower like exophytic warts, but the benign tumors may as well be fringed or nodular. The mainly affected tissue is the oral mucosa including the lips and mucocutaneous junctions. Tongue and esophagus are only occasionally afflicted. Studies conducted by [4] have reported that dogs with immunosuppressive disorders are highly predisposed to canine papillomatosis. Various therapeutic approaches are available for treating COP, such as autoimmune therapy, laser therapy, surgical therapy, cryotherapy, photodynamic therapy, intravenous injection of vincristine sulfate/taurolidine/immunoregulin, intramuscular injections of anthiomaline (lithium antimony thiomalate), oral administration of azithromycin, and topical application of fluorouracil/Thuja [5]. The present study focuses on a refractory case of COP which was later treated with a novel approach using homeopathic medication: *Hydrastis canadensis* and *Calendula officinalis* mother tincture.

Case history and presentation

A 4 year 6 month old crossbred male dog, of weight 20.5 kg, was brought to the Teaching Veterinary Clinical Complex of the University. Cauliflower like growth or warts of varied sizes were present on oral mucosa that progressively developed over a period of one month. The owner informed that same growth were also seen in his other dog which died due to respiratory distress due to overgrowth of warts near the larynx. These warts were grayish-white in appearance. They were friable to touch and caused bleeding. Based upon the clinical examination, it was diagnosed as a case of canine oral papillomatosis. The pet had marked halitosis. Treatment was started with tablet Azithromycin @6 mg/kg orally for 7 days. Treatment with Inj. lithium antimony thiomalate (Anthiomalin[®]; each ml contains 60 mg of lithium antimony thiomalate) was also given with a total dose of 2 ml intramuscularly and a total of 3 doses on alternate days were given. Imiquimod cream was also prescribed for topical application for 2 weeks. Autoimmune therapy was undertaken by injecting intramuscularly with 5 ml of serum from the same dog and was repeated every three days for a total of 2 doses on the 2nd week of treatment. Immunol[®] (a herbal immunomodulator) orally and supplement vitamin b complex and iron for 15 days orally in recommended doses were given. The dog was examined after a week of the treatment. There was no improvement observed.

Results and Discussion

Canine papillomatosis is self-limiting and regression of the verrucous processes takes place 4 to 8 weeks post onset but in few cases may remain and multiply [6]. Various medications have been used to treat the disease but there is no one specific drug which has proved to be very successful and the present case appeared refractory to conventional treatments. Homeopathy is one such arm of complementary and alternative therapy that causes the patient no pain and has no or negligible side effects with use [7].

The previous conventional treatment was stopped and different approach was taken up for the treatment using homeopathic mother tincture of *Hydrastis canadensis* topically which was given initially for a week followed by topical application of another homeopathic mother tincture *Calendula officinalis* for another 2 weeks. The pet showed fast recovery and the warts started regressing after 5 days of application and there was complete regression of lesions after 3 weeks following the treatment. *Hydrastis canadensis* L. commonly known as goldenseal is a medicinal plant widely used in various traditional systems of medicine and as a food supplement. It has been traditionally used by Native Americans as a coloring agent and as medicinal remedy for common diseases and conditions like wounds, digestive disorders, ulcers, skin and eye ailments, and cancer [8]. *Calendula officinalis* (Calendula), belonging to the family of *Asteraceae*, commonly known as English Marigold or Pot Marigold is an aromatic herb which is used in Traditional system of medicine for treating wounds, ulcers, herpes, scars, skin damage, frost-bite and blood purification. It is mainly used because of its various biological activities to treat diseases as analgesic, anti-diabetic, anti-ulcer and anti-inflammatory [9]. *In-vitro*, *Calendula officinalis* plant extracts show anti-cancerous activity on various tumor cell lines derived from leukemias, fibrosarcomas, melanomas, breast, cervix, prostate, pancreas and lung [10].



Figure 1: Day 1 showing numerous papillomas.

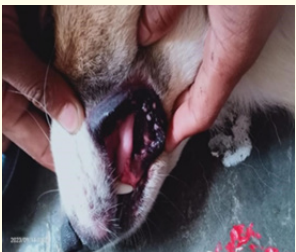


Figure 2: A week after treatment with *Hydrastis canadensis*, massive regression of lesions seen.

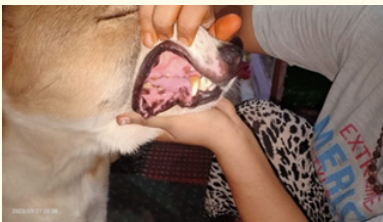


Figure 3: Full recovery following use of *Calendula officinalis* for another 2 weeks.

Parameters	Values when dog was presented	Values after recovery
Hb (g/dl)	17.7	17.5
PCV (%)	57	55.1
TLC (thousand per cumm)	14.9	16.6
Neutrophils (%)	68.3	35
Lymphocytes (%)	22.10	50
Monocytes (%)	3.3	5.1
Eosinophils (%)	6.1	2.2

Table 1: Haematological picture on the 1st day when dog was presented with disease as compared to the picture at recovery.

Conclusion

In this study, the refractory nature of canine oral papillomatosis to conventional treatments was evident, prompting exploration into alternative therapeutic avenues. The introduction of homeopathic medications, specifically *Hydrastis canadensis* and *Calendula officinalis*, demonstrated remarkable efficacy in treating the presented case. The fast recovery, absence of adverse effects, and the historical medicinal significance of these botanical agents suggest a potential breakthrough in COP management. Further research and clinical trials are warranted to validate and extend these findings.

Conflict of Interest

The authors declare that they do not have any conflict of interest.

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