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# Therapeutic management of canine papilloma: a study of six cases

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## Abstract

Clinical study was conducted in six different dog breeds aged between one to nine years were presented to Veterinary Clinical Complex, Rajiv Gandhi Institute of Veterinary Education and Research, Puducherry with a history of multiple cauliflower like outgrowths on various parts of the body. Treatment was carried out with subcutaneous injection of auto vaccine weekly once along with oral Homeopathic drug *Thuja occidentalis* 30C twice daily for a month. Resolution of papilloma was noticed over the course of the treatment and complete recovery was achieved.

Keywords: Auto-vaccine, canine papillomatosis, homeopathy

## 1. Introduction

Canine papilloma or warts is a multiple, benign cauliflower - like appearance on the skin and oral mucosa which may be seen as sessile or pedunculated growth results as a source of infection (Vail and Withrow, 2007; Bianchi *et al.*, 2012) <sup>[5, 1]</sup>. Animal suffering from papillomatosis stays immune for the rest of life with good prognosis and low mortality (Raj *et al.*, 2020) <sup>[3]</sup>. Various therapeutic approaches are available for treating canine papillomatosis such as autoimmune therapy, surgical excision, cryotherapy, hemotherapy, azithromycin, ivermectin, vincristine sulphate, homeopathy and corticosteroids (Singh and Bhardwaj, 2014). The present paper describes about the combined therapy of auto vaccine and homeopathy drug *Thuja occidentalis* in management of canine papilloma.

## 2. Case history and Observation

Clinical study was conducted in six different dog breeds aged between one to nine years were presented to Veterinary Clinical Complex, Rajiv Gandhi Institute of Veterinary Education and Research, Puducherry with a history of multiple cauliflower like outgrowths on various parts of the body. Animal particulars and location of the wart are presented in the Table 1. Physiological parameters were within normal range. On clinical examination, multiple, well circumscribed, firm, raised, cauliflower shaped growth were noticed on oral mucosa, oral commissure, upper lips, growth on the right paw, inner ear, vulval lips and ventral abdomen of animals. On physical examination, these warts were pink in colour Fig 1. Different samples were collected from each animal separately and sent for auto vaccine.

## 3. Preparation of wart vaccine

Wart samples from the older growths of affected animals were excised under aseptic conditions by ligating the ends and were suspended in normal saline and minced properly using mortar and pestle. To inactivate the virus the minced sample were filtered through muslin cloth and treated with formalin (0.4 ml per 100 ml of filtrate) and kept overnight. Strepto-pencillin 2 mg/ml was also added to the filtrate, transferred into vials and kept at 0 to  $40 \,^{\circ}$ C until use.

## 4. Vaccination Protocol

Prepared auto vaccine was administered subcutaneously for three to four weeks interval and evaluation of papilloma regression was recorded as described by Marins *et al.*, 2006<sup>[2]</sup>.

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## 5. Treatment

All the animals were initiated with oral homeopathic drug *Thuja occidentalis* 30  $^{0}$ C (Dr Reckeweg *Thuja Occidentalis* Dilution 30  $^{0}$ C, 200  $^{0}$ C) 2-3 drops twice daily for a month along with subcutaneous injection of auto vaccine weekly interval and regression of papilloma was observed over the course of treatment Fig 2, 3 &4.

## 6. Results and Discussion

All the animals showed marked reduction in the size of wart and changes in the colour noticed during the 3 weeks of treatment which is in accordance with Marins *et al.*, 2006 <sup>[2]</sup>. According to Verissimo *et al.*, 2002 <sup>[6]</sup>, different drug protocols were used in the management of bovine papillomas and reported that use of autovaccine along with homeopathy drug were found to be more effective. Likewise, in our study use of *Thuja occidentalis* combined with wart vaccine found to be more successful in the treatment of canine papilloma.

## Table 1: Animal particulars and location of the wart

Case no.	Breed	Age (yr)	Sex	Location of the wart
1	German Shepherd	2	Female	Oral mucosa and lips
2	Shih Tzu	3	Female	Oral commissure and upper lips
3	Nondescript	9	Female	Paw
4	Labrador Retriever	1	Male	Oral commissure, upper lips and inner ear
5	Nondescript	2	Male	Forehead and lips
6	Siberian Husky	1	Female	Vulval lips and ventral abdomen



Fig 1: Multiple wart lesions around the oral mucosa



Fig 2: Regression of wart lesions during the 1<sup>st</sup> week of treatment



Fig 3: Regression of wart lesions during the 2<sup>st</sup> week of treatment



Fig 4: Regression of wart lesions during the 3<sup>st</sup> week of treatment

## 7. Acknowledgement

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## 8. Conflict of interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and  $/ \mbox{ or publication of this article.}$ 

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