



International Journal of Veterinary Sciences and Animal Husbandry



ISSN: 2456-2912

NAAS Rating (2025): 4.61

VET 2025; 10(10): 412-414

© 2025 VET

www.veterinarypaper.com

Received: 23-08-2025

Accepted: 26-09-2025

Dr. V Arul

Assistant Professor,
Department of Veterinary
Physiology and Biochemistry,
Veterinary College and Research
Institute, Salem, Tamil Nadu,
India

Dr. R Suresh

Assistant Professor,
Department of Animal
Nutrition, Veterinary College
and Research Institute, Salem,
Tamil Nadu, India

Dr. P Vijay Kumar

Assistant Professor,
Department of Animal Genetics
and Breeding, Veterinary College
and Research Institute, Salem,
Tamil Nadu, India

Dr. A Sakthivel Selvan

Assistant Professor,
Department of Animal Genetics
and Breeding, Veterinary College
and Research Institute, Salem,
Tamil Nadu, India

Corresponding Author:

Dr. V Arul

Assistant Professor,
Department of Veterinary
Physiology and Biochemistry,
Veterinary College and Research
Institute, Salem, Tamil Nadu,
India

Management of canine oral papillomatosis by autogenous blood therapy

V Arul, R Suresh, P Vijay Kumar and A Sakthivel Selvan

DOI: <https://www.doi.org/10.22271/veterinary.2025.v10.i10f.2669>

Abstract

A 2-year-old, male, non-descript dog was presented with multiple cauliflower-like masses on the oral mucosa and gingiva. Based on clinical appearance and fine needle impression smears from the lesion, this case was diagnosed as a papillomatous growth. The dog was treated by autogenous blood therapy in which 2.5 ml of autologous blood was collected and injected intramuscularly. The same procedure was repeated one week later. Marked regression of the papillomas was noted after the first dose and complete resolution occurred following the second dose. No recurrence was observed during the follow-up period. This case clearly demonstrates the potential of autohemotherapy as a traditional, cost-effective approach for the successful management of canine oral papillomatosis.

Keywords: Autohemotherapy, Canine, Papillomatosis, Papillomavirus, Wart

Introduction

Canine Papillomatosis is caused by Papillomaviruses and are well known to cause proliferative epithelial lesions (Papillomas or “warts”) in many vertebrate species, including dogs. Papillomaviruses (PVs) are small, non-enveloped, double-stranded DNA viruses that infect stratified squamous epithelium and causes papillomatois. In dogs, canine papillomaviruses (CPVs) are classified into multiple genera and types, with at least 24 CPV types currently recognized. Among these, CPV-1 (also known as canine oral papillomavirus, COPV) is classically associated with oral and mucocutaneous lesions in young dogs (Medeiros-Fonseca *et al.*, 2023) [5]. Clinically, oral papillomas in dogs typically present as multiple, exophytic, cauliflower-like proliferative growths on the oral mucosa, lips, gingiva or oropharynx. They often begin as smooth papules or plaques, which then adopt a frondose or filamentous morphology. The lesions are more commonly seen in juvenile or immunologically naive dogs (often < 2 years of age) and tend to regress spontaneously over weeks to a few months in immunocompetent hosts (Lane *et al.*, 2017) [3]. Occasionally, persistent or extensive lesions may require therapeutic intervention. Although traditionally considered benign and self-limiting, there is emerging evidence of malignant transformation of CPV-associated papillomas into squamous cell carcinoma (SCC) or carcinoma in situ in some dogs (Thaiwong *et al.*, 2018) [6]. This case reports the incidence and successful therapeutic approach to canine oral papillomatosis in a non-descript dog.

Case Presentation and Diagnosis

A 2-year-old, male, non-descript dog was presented to the veterinary clinic with a history of proliferative growths in the oral cavity noticed by the owner over the past two weeks. The lesions gradually increased in size and number, leading to difficulty in mastication and occasional salivation. Clinical examination revealed multiple, irregular, cauliflower-like, sessile to pedunculated masses distributed on the buccal mucosa, gingiva and inner aspects of the lips. The growths varied in size from a few millimeters to approximately 2 cm in diameter. The dog was bright, alert and responsive with a normal appetite and no systemic abnormalities were recorded. The vital parameters, H aematological and biochemical parameters, were within normal range. Fine needle impression smears from the lesion revealed clusters of

epithelial cells with mild anisocytosis and perinuclear vacuolation, suggestive of a virus-induced proliferative lesion. The case was diagnosed as papillomata.

Treatment and Discussion

The dog was treated using autogenous autohemotherapy. Approximately 2.5 ml of autologous whole blood was collected aseptically from the cephalic vein and administered intramuscularly. The procedure was repeated at an interval of one week, with a total of two doses given. Supplements were provided during this course. Following the first injection, partial regression of the papillomatous growths was observed within 5–7 days. By the time of the second dose, the lesions had reduced considerably in size and number. Complete regression of the oral papillomas with restoration of normal oral mucosa was achieved after the second dose. The dog was monitored for an additional two weeks for the adverse effects related to therapy and any recurrence.

Canine oral papillomatosis is caused by CPVs (classically CPV-1/COPV for mucosal lesions) which infect stratified squamous epithelium and produce exophytic, cauliflower-like growths on the oral mucosa of young or immunologically naive dogs. Lesions are frequently multiple and classically affect dogs < 2 years of age and in most immunocompetent animals they undergo spontaneous regression as cell-mediated immunity develops. The natural history and immune control of COPV have been documented experimentally and clinically; spontaneously regressing papillomas induce systemic antibody and cell-mediated responses that correlate with lesion resolution (Medeiros-Fonseca *et al.*, 2023) [5].

Because spontaneous regression is common, treatment is only required when lesions are extensive, persistent, interfere with eating or are cosmetically unacceptable (Ghim *et al.*, 2000) [1]. A range of therapies has been reported in the literature, from conservative monitoring to medical and surgical interventions (Thaiwong *et al.*, 2018) [6]. Options described include surgical excision or CO₂ laser ablation for solitary or obstructive lesions, topical or systemic antivirals and immunomodulators (interferon), antibiotics with putative immunomodulatory action such as azithromycin (Yagci *et al.*, 2008) [7], autogenous hemotherapy or autovaccination and papillomavirus vaccines (autogenous or commercial) used off-label (Levinson *et al.*, 2019) [4]. Choice of therapy depends on lesion severity, clinician experience, owner goals and cost. Although most canine oral papillomas are benign and self-limiting, in a few persistent or unusual cases they can change into malignant (cancer), such as carcinoma in situ or squamous cell carcinoma (Zaugg *et al.*, 2005; Thaiwong *et al.*, 2018) [8, 6]. Autohemotherapy stands out as a simple and inexpensive option for managing canine oral papillomatosis (John *et al.*, 2019) [2]. It does not require specialized drugs or equipment and adverse effects are rarely reported. However, unlike treatments such as azithromycin, interferon or surgical removal, the evidence for autohemotherapy is limited. Most published reports are individual case descriptions or small case series, without controlled trials to confirm its true effectiveness. The rapid and complete resolution in this 2-year-old, male, non-descript dog following two low-volume IM autologous blood injections is consistent with prior case reports of autohemotherapy for canine oral papillomatosis.



Before Autogenous Blood Therapy



After Autogenous Blood Therapy

Conflict of Interest

Not available

Financial Support

Not available

References

1. Ghim S, Newsome J, Bell J, Sundberg JP, Schlegel R, Jenson AB. Spontaneously regressing oral papillomas induce systemic antibodies that neutralize canine oral papillomavirus. *Exp Mol Pathol.* 2000;68(3):147–151. doi:10.1006/exmp.1999.2298
2. John R, Kuotsu N, Ozukum S, Das G, Chutia T, Lalruatkima A, *et al.* Efficacy of auto-hemotherapy in canine oral papillomatosis: A case report. *Indian J Vet Med.* 2019;39(1):65–66.
3. Lane HE, Weese JS, Stull JW. Canine oral papillomavirus outbreak at a dog daycare facility. *Can Vet J.* 2017;58:747–749.
4. Levinson M, Kirby A, Richman A, Hall M. Severe persistent canine oral papillomatosis: A multimodal approach including interferon alpha-2B, CPV-1 autologous vaccine, CO₂ laser ablation and aggressive cryotherapy. *Vet Rec Case Rep.* 2019;7(2):e000774.

5. Medeiros-Fonseca B, Faustino-Rocha AI, Medeiros R, Oliveira PA, Gil da Costa RM. Canine and feline papillomaviruses: an update. *Front Vet Sci.* 2023;10:1174673. doi:10.3389/fvets.2023.1174673
6. Thaiwong T, Sledge DG, Wise AG, Olstad K, Maes RK, Kiupel M. Malignant transformation of canine oral papillomavirus (CPV1)-associated papillomas in dogs: an emerging concern? *Papillomavirus Res.* 2018;6:83–89. doi:10.1016/j.pvr.2018.10.007
7. Yağcı BB, Ural K, Ocal N, Haydardedeoğlu AE. Azithromycin therapy of papillomatosis in dogs: a prospective, randomized, double-blinded, placebo-controlled clinical trial. *Vet Dermatol.* 2008;19(4):194–198. doi:10.1111/j.1365-3164.2008.00674.x
8. Zaugg N, Nespeca G, Hauser B, Ackermann M, Favrot C. Detection of novel papillomaviruses in canine mucosal, cutaneous and in situ squamous cell carcinomas. *Vet Dermatol.* 2005;16:290–298. doi:10.1111/j.1365-3164.2005.00467.x

How to Cite This Article

Arul V, Suresh R, Kumar PV, Selvan AS. Management of canine oral papillomatosis by autogenous blood therapy: A case report. *International Journal of Veterinary Sciences and Animal Husbandry.* 2025; 10(10): 412-414.

Creative Commons (CC) License

This is an open-access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.