

Efficacy of auto-hemotherapy in canine oral papillomatosis - a case report

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Abstract

A two year old male mongrel dog was presented with signs of cauliflower like growth (warts) on multiple locations including peri-ocular region of the left eye, and the oral cavity. Based upon the clinical and physical examination it was diagnosed as a case of canine papillomatosis. The clusters of cauliflower type swellings are highly recognizable due to their distinct appearance. The animal was treated with Auto-hemotherapy. The dog responded with marked noticeable and appreciable regression in the size of the warts. Complete regression of the warts was observed on the 14th day of treatment.

Key words: Dog, Canine papillomatosis, Auto-hemotherapy

Canine Papilloma Virus (CPV), a double stranded non envelope DNA virus of the Papovaviridae family causes Canine Papillomatosis and has a strong tropism for cutaneous squamous or mucosal epithelium (Gross *et al*, 2005). CPV are a cluster of 8 viruses designated CPV1 through to CPV8 affecting dogs worldwide (Lange and Favrot, 2011). Single or multiple cauliflower like lesions appears with average size of 1.0 cm in diameter and are mostly located in the mucous membranes and the muco-cutaneous junction.

Auto-hemotherapy (AHT), a widely used therapeutic technique in veterinary practice that treats several pathological conditions with satisfactory clinical results (Borges *et al*, 2014). The procedure consists of collecting a whole blood sample from the sick animal which is administered immediately through intra-muscular route, sub-cutaneous, intra-venous or intra-dermal (Mettenleiter, 1936).

Case History

A two year old male local dog was presented in the Veterinary Hospital of VCC, College of Veterinary Sciences, CAU, Peren District with the complain of presence of multiple tumour like growths on several locations of the body. On clinical examination it was observed that there are cauliflower like growth or warts on several parts of the body including peri-ocular region of the left eye, and the oral cavity (Fig 1 and Fig 2). As per the owner's report, appearance of multiple warts was noticed a month back with increment in size

and number. Based upon the clinical examination and distinct appearance it was diagnosed as a case of canine papillomatosis.



Fig 1: Papilloma in the oral and ocular area

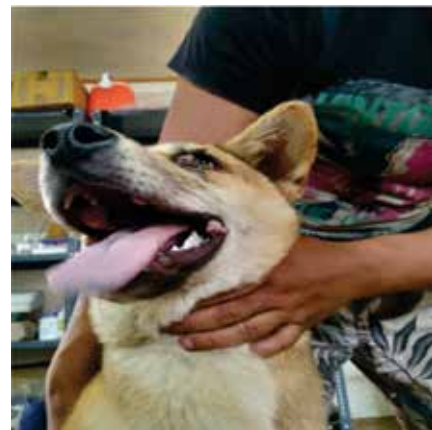


Fig 2: Cauliflower-like wart in median canthus

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Treatment and Discussion

For the present case; it was decided to undertake auto-hemotherapy. Accordingly the animal was administered with its own blood. Venous blood of 5 ml was drawn from the cephalic vein by using 22G hypodermic needle in a disposable syringe and was immediately injected deep intramuscularly by taking all sterile precautions. The animal was kept under observation for one week. There was marked visible improvement with regression in the warts size. Complete regression of the warts was observed on the 14th day. (Fig 3 and 4) and no further treatment was required.



Fig 3: Complete regression of the oral warts



Fig 4: Post- therapy on the 14th day

Auto-hemotherapy (AHT) is widely used therapeutic technique in veterinary that presents satisfactory clinical results to treat several pathologies (Borges *et al*, 2014). As per Borges *et al*, (2017), in the routine canine clinical practice, empirical intra-muscular

auto-hemotherapy has shown excellent result based mostly on the experience with bovine papillomatosis, as there are very few works and protocols described for the treatment in dogs. The observation in the present case are in accordance with the findings of Borges *et al*, (2017) who reported that auto-hemotherapy applied proved to be effective in treating dogs with moderate oral papillomatosis with no clinical side effects. Cases of extensive papillomatosis in non-descript cow were also successfully treated by Ganesh Hedge (2011) and Nehru *et al* (2017), without using any chemical agents.

Auto-hemotherapy given in this case @5ml intramuscularly proved to be effective to treat the dog with oral papillomatosis leading to complete remission after 14 days. The present report suggests that without any chemical agents, auto-hemotherapy can be effectively employed to treat canine oral papillomatosis although the role of platelets in immune modulation and tissue repair needs further investigation.

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