Efficacy of auto: Hemotherapy in canine oral papillomatosis: A case report

Reihi John, Neithono Kuotsu, S Ozukum, Gunjun Das, Tukeshwar Chutia, Andrew Lalruatkima, Ningombam Bhumapati and Laltlankimi

Abstract
A two year old male local 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 examination, it was diagnosed as a case of canine papillomatosis. Auto-hemotherapy treatment proved effective in treating the condition. Complete regression of the warts was observed on the 14th day of treatment.

Keywords: Dog, canine papillomatosis, Auto-hemotherapy

Introduction
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) [9]. CPV are a cluster of 8 viruses designated CPV1 through to CPV8 affecting dogs worldwide (Lange and Favrot, 2011) [10]. Observation of warts in dogs (Delius et al., 1994) [6] and the occurrence of the warts on penis, vulva, skin and conjunctival membranes (Sanson et al., 1996) [13] has been reported. Single or multiple cauliflowers 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) [2]. 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) [11].

Case History and Diagnosis
A two-year-old male local dog was presented in the Veterinary Hospital, College of Veterinary Sciences, CAU, Peren District with the complain of presence of wart like growth in the facial region. Observations of multiple warts were noticed a month back with increment in size and number. On clinical examination, cauliflower like growth/ warts around the peri-ocular region of the left eye and the oral cavity were observed (Fig 1: A & B). Based upon the clinical examination, it was diagnosed as a case of canine papillomatosis.

Fig 1 A & B: Macroscopic appearance of oral papillomatosis before autohemotherapy.
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 (Calvert, 2003). The papilloma characteristics observed in this case is similar with the symptoms described in the literature for oral papillomatosis (Fantini et al. 2015; Bambo et al. 2012; Cesarino et al. 2008; Borges et al. 2017) [7, 1, 5, 3]. In this case non-regression of the warts was observed, so therapeutic intervention was undertaken.

Auto-hemotherapy (AHT) is a widely used therapeutic technique in veterinary that presents satisfactory clinical results to treat several pathologies (Borges et al, 2014) [2]. As per Borges et al. 2017 [3], in the routine canine clinical practice, empirical infra-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 [3] who reported that auto-hemotherapy applied proved to be effective in treating dogs with moderate oral papillomatosis with no clinical side effects.

Conclusion
Auto-hemotherapy administered @ 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.

Conflict of interest
There is no conflict of interest.

References