

Cryosurgery in the treatment of cutaneous horn associated with papillomatosis: a case report

F. PAIVA*, M. SOUZA*, L. JUNIOR†, T. COSTA*, D. ARAUJO*, C. BOTELHO*, and J. FERNANDES§

* Post Graduation Program, Universidade Federal Rural do Rio de Janeiro, RJ, Brasil,

† Autonomous Veterinary, RN, Brasil,

§ Department of Veterinary Science, Universidade Federal Rural de Rio de Janeiro, RJ, Brasil.

INTRODUCTION

Cutaneous horns are keratinized acellular formations, manifesting in association with other skin diseases. The occurrence is rare, with frequency of 0.1% of skin biopsies in dogs.

CASE REPORT

This report describes a case of cutaneous horn associated with papillomatosis treated with cryosurgery. A 5-year-old, male, mixed-breed dog was attended showing a keratinized horn, measuring 3.0 x 4.0cm, protruding from the snout, with multiple warty papillomatosis lesions of the face and oral cavity. The animal was concomitantly diagnosed with hemoparasitosis (*Ehrlichia canis*) and treated with Doxycycline Hydrochloride, 5mg/kg, every 12 hours, for 30 days. After resolution of hemoparasitosis, under general anesthesia the apical portion of the horn was resected and the base of the surgical wound was frozen, in two freezing cycles approximately 1 minute each, in direct spray application. Cryosurgery was used on the other verrucous lesions, with two cycles of freezing (time). After a 14-day recovery period, the cryosurgery was repeated on the remaining warty lesions and the remaining portion of the cutaneous horn, in two freezing cycles similar to the first application. After 10 days from the second session, all lesions

CONCLUSION

The treatment indicated for cutaneous horns is the surgical excision, however in this case, cryosurgery was chosen because the affected region was of difficult surgical access. In conclusion, cryotherapy may be an effective tool for the management of cutaneous horn secondary to papillomatosis if surgical removal is less desirable.

ACKNOWLEDGEMENTS

This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Finance Code 001

REFERENCES

Miller WHJ, Griffin CE, Campbell KL. *Muller and Kirk's Small Animal Dermatology*. St. Louis, MO: Elsevier, 2013; 695-843.

Falk E et al. Two cutaneous horns associated with canine papillomavirus type 1 infection in a pit bull dog. *Vet Dermatol* 2017; 4: 420-421.

Koutinas AF et al. Skin Lesions in Canine Leishmaniasis (Kala-Azar): A Clinical and Histopathological Study on 22 Spontaneous Cases in Greece. *Vet Dermatol*. 1993; 3: 121-130.



Figure 1: 5-year-old, male, mixed-breed dog was attended showing a keratinized horn, measuring 3.0 x 4.0cm, protruding from the snout, with multiple warty papillomatosis lesions of the face and oral cavity. A: Front view. B: Bottom view.



Figure 2: A: First intervention, sectioned lesion at the base of the horn. B: First intervention, freezing applied to the lesion bed after section. C/D: Remaining injuries 14 days after the first session, at the time of the second session

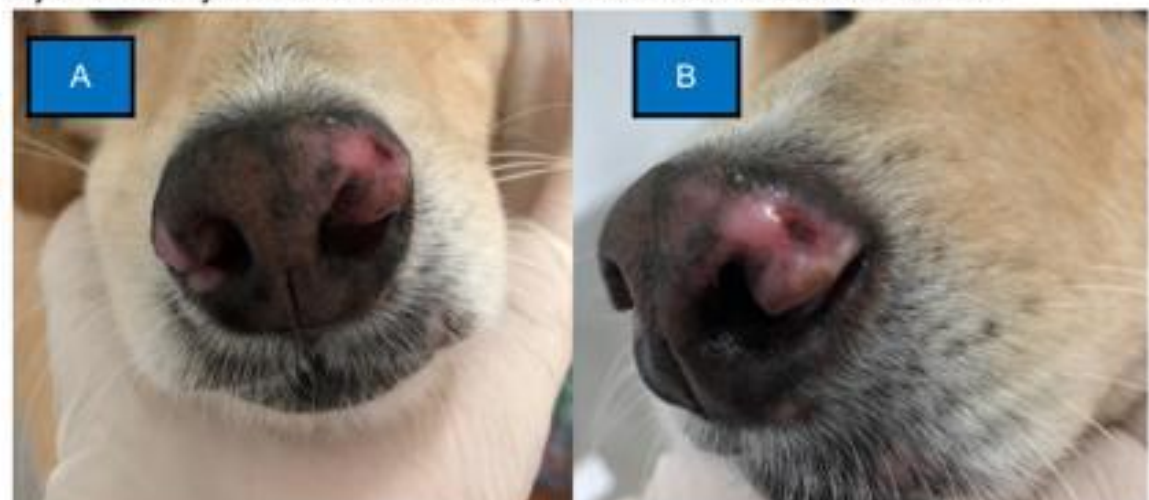


Figure 3: Complete regression of the lesions 10 days after the second session. A: front view. B: side view.