



ISSN (E): 2277-7695

ISSN (P): 2349-8242

NAAS Rating: 5.23

TPI 2023; SP-12(8): 19-20

© 2023 TPI

www.thepharmajournal.com

Received: 01-06-2023

Accepted: 06-07-2023

J Jyothi

Assistant Professor, Department of Veterinary Clinical Complex, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

B Swathi

Assistant Professor, Department of Veterinary Pathology, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

M Srinivas

Assistant Professor, Department of Veterinary Microbiology, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

R Srujan

UG Scholar, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

Corresponding Author:

J Jyothi

Assistant Professor, Department of Veterinary Clinical Complex, College of Veterinary Science, Rajendranagar, Hyderabad, Telangana, India

Diagnostic and therapeutic management of sebaceous gland adenoma in a crossbred dog

J Jyothi, B Swathi, M Srinivas and R Srujan

Abstract

A 9-year-old male crossbred dog presented to VCC, C.V.Sc, Rajendranagar with the anamnesis of multifocal wart or nodule like growths on the skin (head, pedal, interdigital region, dorsal surface of body, on the eyelid region and ventral surface of abdomen) showing cauliflower like growth and erythematous in nature. Macroscopically, a whitish nodular mass small to medium in size, moderate to firm in consistency was noticed. The wart was excised and collected and subjected to histopathological study and was diagnosed as sebaceous gland adenoma. Dog was treated with thuja oral drops, and supportive therapy. Skin lesions regressed after 28 days of treatment and complete recovery observed after 40 days.

Keywords: Adenoma, dog, sebaceous gland

Introduction

Sebaceous glands are normally noticed below the skin. These glands secrete sebum, oily in nature, which lubricates the skin and hair of animals. They were more common in geriatric dogs and cats [1-4]. Adenomas were very common epithelial skin tumors and present on dog skin (all parts of the body). The primary sites for sebaceous gland tumors are head, abdomen and thorax [1, 2, 5]. Eyelid is the most common site for these tumors [2, 4, 6]. The exact cause of sebaceous gland adenomas is not known [7], alterations in the hormones important in their development [8]. They can be classified into nodular hyperplasia, sebaceous adenoma, sebaceous epithelioma and sebaceous adenocarcinoma according to the level of cell maturation.

Materials and Methods

Male crossbred dog aged 9 years was presented to the Veterinary Clinical Complex, C.V.Sc, Rajendranagar with the history of development of greyish white warts on the forehead, legs, interdigital spaces dorsal part of body, on the eyelid region and ventral surface of abdomen. The growth was excised and collected for fixing in 10% formalin for 48 hours, later kept overnight for washing under tap water, dehydration in ascending grades of alcohol, cleared in xylene and embedded in paraffin. Prepared blocks were cut into 5 microns thick sections and were stained with routine Haematoxylin & Eosin staining method.

Results and Discussion

The multifocal greyish white elevated wart like solid growths were on dorsal surface of body, on the eyelid region and ventral surface of abdomen (Fig.1). They were moderately hard in consistency. Grossly, the mass was haemorrhagic and covered with skin. The excised parts of skin revealed proliferative regions divided by fine connective tissue trabeculae into small lobules. Microscopically, multiple lobules composed of mature sebaceous glandular epithelial cells having abundant eosinophilic cytoplasm which is vacuolated along with centrally placed hyperchromatic nuclei. The lobules were well demarcated by encircling fibrous connective tissue including few basophilic reserve cells with scanty cytoplasm. No observation of nuclear atypia and mitotic figures. (Fig. 3). Initially the animal was treated by Antibiotics like enrofloxacin @ 5mg/kg b.wt and injection Ivermectin @ 200 Micrograms/kg b.wt and inj Anthiomaline @ 1ml/20 kg b.wt deep intramuscular but there was no improvement was noticed. Animal was kept on thuja oral drops (10 drops/day) for 40 days. The skin lesions regressed after 28 days of therapy [10]. Complete recovery of wart lesions observed on day 40. No regrowth of warts observed.



Fig 1: Multifocal wart growths noticed on various parts of body.

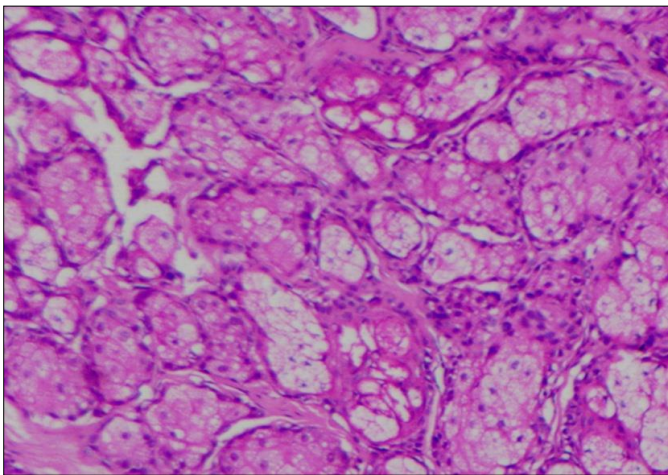


Fig 2: Photomicrograph of growth showing multiple well demarcated lobules separated by connective tissue and containing variably differentiated sebocyte in the centre and undifferentiated basaloid cells at periphery H&E 10X

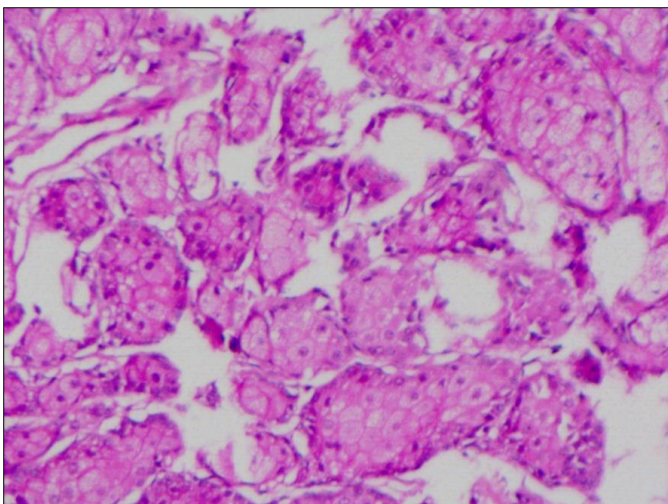


Fig 3: Photomicrograph of growth showing multiple well demarcated lobules in which few showing cystic changes and few showing complete eosinophilia H&E 10X

were suggestive of sebaceous glandular adenoma. The Tuja drops are very effective against warts/papilloma.

Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

1. Strafuss AC. Sebaceous gland adenomas in dogs. *J Am. Vet. Med. Assoc.* 1976;15:640-642.
2. Pullet LT, Stannard AA. Tumor of the Skin of Soft Tissues. In: Moulton J.E., Ed. *Tumors in Domestic Animals*. 3rd ed., University of California Press, California. 1990, 23-87.
3. Roberts SM, Severin GA, Lavach JD. Prevalence and treatment of palpebral neoplasms in the dog: 200 cases (1975- 1983). *J Am. Vet. Med. Assoc.* 1986;189:1355-1359.
4. Vail MD, Withrow SJ. Tumors of the skin and subcutaneous tissue. In: Withrow, S.J., MacEwen, E.G., Eds. *Small Animal Clinical Oncology*. 2nd ed., W.B. Saunders Company. Pennsylvania. 1996, 167-191.
5. Halouzka R, Nevole M. Sebaceous gland tumors in dogs. *Vet. Med. (Praha)*. 1976;21:565-572.
6. Krehbiel JD, Langham RF. Eyelid neoplasms of dogs. *Am. J Vet. Res.* 1975;36:115-119.
7. Jakab C. Histopathological analysis of tumors of the sebaceous gland in spaniels. *Kisallat Praxis*. 2003;4:36-38.
8. Rungsipipat A. Neoplasms of dogs in Bangkok. *Thailand Journal of Veterinary Medicine*. 2003;33:59-66.
9. Ozyigit MO, Akkoc A, Yilmaz R. Sebaceous gland adenoma in a dog. *Turk J Vet Ani Sci*. 2005;29:1213-1216.
10. Sumathi D, Ramesh P, Pazhanivel N, Sandya Bhavani M, Amirinder Singh K, Jayathangaraj MG. Management of Cutaneous Papilloma in a Labrador Dog – A Case Report *Indian vet. J.* 2019;96(12):42-43.

Conclusion

In the present case, macroscopic and microscopic lesions