



ISSN (E): 2277- 7695

ISSN (P): 2349-8242

NAAS Rating: 5.03

TPI 2018; 7(4): 247-248

© 2018 TPI

www.thepharmajournal.com

Received: 22-02-2018

Accepted: 25-03-2018

Kolipaka Rajesh

Department of Veterinary
Physiology, College of
Veterinary Science, Hyderabad,
Telangana, India

J Shiva Jyothi

Department of Veterinary
Microbiology, College of
Veterinary Science, Hyderabad,
Telangana, India

Surgical approach for mammary tumor in canines: case report

Kolipaka Rajesh and J Shiva Jyothi

Abstract

In Veterinary medicine, mammary tumors represent the most frequently diagnosed neoplasm in intact female dogs, and 50% of these are malignant. A study focusing on the incidence of canine mammary tumors found tumors in approximately 0.05% of females that were spayed before their first heat cycle. This figure increased to 8% or 26% when the animals were spayed after their first or second heat, respectively. However, if the animals were spayed later, the risk of developing malignant tumors (MN) was the same as for an intact bitch. Mammary tumors can vary in size from a few millimeters to over a few centimeters, and at least 50% of the cases present multiple masses mainly located at the caudal glands. Generally, in canine mammary tumors (CMT), especially in metastatic tumors, genes in charge of DNA repair show genetic instability with unknown causes. Nevertheless, it is believed that aberrant tumor cell division with damaged DNA replication, hypoxia, mutations accumulation and DNA repair genes, epigenetic modifications can contribute to this phenomenon. This article describes canine mammary surgical treatment as an approach to remove the benign tumor.

Keywords: canine, ketamine, xylazine, mammary tumor.

Introduction

Mammary tumors are one of the most common tumors to affect the female dog. The average age at diagnosis is 8 to 10 years. Approximately 50 per cent are benign and many low-grade carcinomas also follow a relatively benign course and do not metastasize. Up to 50 per cent of bitches may present with multiple tumors affecting different glands; these lesions can be of different histological types. Male dogs can suffer from mammary tumors, with an estimated risk of less than 1 per cent compared with that of female dogs. In one small study, six of seven tumors in male dogs were benign and treated successfully surgically (Saba and others 2007).

Case History

A case (dog) has been presented to people for animal zumarathbazzr (PFA), caseNo.121 owner name: Mahesh Dhulpet, aged -8 years, with an history of mammary tumor.

Treatment

Aseptic cleaning of the mammary gland surrounded by the benign tumor (Fig 1) was preceded by injecting of profapal@4-6mg/kgwt. Surgical incision in and around the sides of the tumor followed by ligating the arteries and veins by using artery forceps pertaining to that anatomical region. Since the animal has bleed heavily ethamsylate @12.5mg/kgwt was given so as to decrease the bleeding. Surrounding masses of the tumor which includes the damaged portion of the mammary gland was incised and removed surgically. Continuous sutures were used for closing the incision of the subcutaneous region followed by interrupted sutures for skin incision (Fig 2). Post surgical care was done with prolonged antibiotic therapy Intacef 250@mg/kgBwt, melonex @0.5mg/kgb.wt, tribivet@4-6mg/kgbwt for seven seven days followed by regular dressing on every alternate day.

Correspondence

Kolipaka Rajesh

Department of Veterinary
Physiology, College of
Veterinary Science, Hyderabad,
Telangana, India



Fig 1: Before surgery



Fig 2: After surgery with Interrupted Suture pattern

Conclusion

The results of the present study supported the conclusion that, in female dogs, mammary tumors are a major animal health problem that is increasing, and further development and research using veterinary oncology is required. In dogs, mammary tumors frequently present as benign and malignant lesions, often showing similar frequencies. Since the dogs especially regarding to the street dogs which are at the most neglected part are to be of concern since our studies at people for animal has given a very higher number of animals which are at risk of tumors. Furthermore assistance from the people and government may even more aid us in the treatment of these bearers.

References

1. Klopffleisch R, Lenze D, Hummel M, Gruber A. Metastatic canine mammary carcinomas can be identified by a gene expression profile that partly overlaps with human breast cancer profiles. *BMC Cancer*. 2010; (10):618. pmid:21062462
2. Moe L. Population-based incidence of mammary tumors in some dog breeds. *J Reprod Fertil Suppl*. 2001; 57:439-443. pmid:11787188
3. Nicole Ehrhart. Surgical Treatment for Mammary Tumors, VMD, MS Colorado State University cliniciansbrief.com, 2013.
4. Saba CF, Rogers KS, Newman SJ, Mauldin GE, Vail DM. Mammary gland tumors in male dogs. *Journal of*

Veterinary Internal Medicine, 2007; 21:1056-1059

5. Schneider R, Dorn CR, Taylor DO. Factors influencing canine mammary cancer development and postsurgical survival. *J Natl Cancer Inst*. 1969; (43):1249-61. pmid:4319248
6. Wey N, Gutberlet K, Khon B. Mamma tumore bei der huding: Hormolle abhangigkeit unter besonderer berucksichtigung von 17 β ostradiol und progesteron. *Kleintierpraxis*. 2000; (45):19-31.