



## BILATERAL MASTECTOMY IN A DACHSHUND – A CASE REPORT

**Harish Kulkarni\*, Bhoyar, R. & R.B. Dhabale**

Veterinary Hospital, APMC Yard, Gandhi Gunj, Bidar-585401 Karnataka

### ABSTRACT

A 6 year old female, Dachshund was presented to Veterinary Hospital, APMC yard, Gandhi Gunj, Bidar with a history of small multiple tumor like masses near the left cranial abdominal and around the right caudal mamma. On clinical examination, bitch was apparently healthy, palpable hard mass was noticed around left 3<sup>rd</sup> cranial and 4<sup>th</sup> right caudal mamma along with small lumps. The case was diagnosed as mammary tumor. The occurrence of mammary tumor and its surgical management is reported in the present paper.

**Key words:** tumor, Mammary gland , clinical examination

### INTRODUCTION

Mammary gland tumors are one of the most common neoplasm's in female dogs. They can be either malignant or benign and arise from the different types of tissues like epithelial or glandular tissue and mesenchymal or connective tissue. The most common type of tumors are from the glandular tissues and it includes adenoma, carcinoma and adenocarcinoma (Todorova *et al.*, 2005). Half of mammary gland tumors are benign and can be treated successfully with surgery alone, while half are malignant and have the potential for metastasis (Anoop *et al.*, 2006).

### CASE HISTORY AND OBSERVATIONS

A 6 year old female, Dachshund was presented to Veterinary Hospital, APMC yard, Gandhi Gunj, Bidar with a history of small multiple masses near the left cranial abdominal and around the right caudal mamma.

On clinical examination, animal was apparently healthy and all the physiological and haemato-biochemical values were within the normal range. On palpation hard mass was noticed

around left 3<sup>rd</sup> cranial and 4<sup>th</sup> right caudal mamma along with small lumps. The case was diagnosed as mammary tumor. Since the lumps were small, bilateral caudal mastectomy was planned.

## **TREATMENT AND DISCUSSION**

Bitch was premedicated with atropine sulphate (Atral<sup>®</sup>) @ 0.04mg/kg B.W. and xylazine hydrochloride (Xylaxin<sup>®</sup>) @ 1.0mg/kg B.W. intramuscularly. Preoperatively, inj. Ceftriaxone (Intacef<sup>®</sup>) @ 25mg/kg B.W. and tramadol (Domodol<sup>®</sup>) @ 2mg/kg B.W. were administered intravenously. The surgical site was prepared aseptically. Anaesthesia was induced and maintained with combination of diazepam (Calmpose<sup>®</sup>) @ 0.25mg/kg B.W. and ketamine hydrochloride (Aneket<sup>®</sup>) @ 5mg/kg B.W. intravenously and pet was intubated. An elliptical incision was made around the mammary gland including 1cm surrounding normal tissue. Since the blood and lymph supply to the 2<sup>nd</sup> and 3<sup>rd</sup> mammary glands is by cranial superficial epigastric artery and 4<sup>th</sup> and 5<sup>th</sup> is by caudal superficial epigastric artery. Due to this common venous and lymphatic drainage all the respective mammary glands were excised carefully. The inguinal canal vessels were ligated using PGA 1 and resected. Sufficient skin was preserved to allow the opposition. Multiple walking sutures were placed followed by subcuticular sutures with PGA 1-0 to avoid dead space. Skin was sutured with simple interrupted pattern using prolene 1-0.

**Inj. Atral<sup>®</sup> (1mg/ml)- Geevet Remedies. Gujarat.**

**Inj. Xylaxin<sup>®</sup> (20mg/ml)- Indian Immunologicals Ltd. Hyderabad.**

**Inj. Calmpose<sup>®</sup> (5mg/ml)- Ranbaxy lab. Ltd. New delhi.**

**Inj. Aneket<sup>®</sup> (50mg/ml)- Neon labs. Palghar.**

**Inj. Domadol<sup>®</sup> (100mg/2ml)- Unichem Ltd. Gaziabad.**

**Inj. Intacef<sup>®</sup> (500mg) – Intas pharmaceuticals. Ahmedabad.**

**Pideen<sup>®</sup> - contains 5%povidone iodine by Alge pharmaceuticals PVT. Ltd, Bangalore.**

Post operatively, ceftriaxone @ 25mg/kg B.W. intravenously for 7 days and meloxicam (Melonex<sup>®</sup>) @ 0.2mg/kg B.W. intramuscularly for 5 days were administered with alternate dressing of the wound with Pideen<sup>®</sup> solution. Skin sutures were removed after 10days. Animal recovered uneventfully without any complications.

The risk of development of mammary tumor increases significantly with increasing age in bitch. Early spaying significantly decreases the risk for tumor development (Theilen and Madewell, 1979). Todorova *et al.*, (2005) concluded that the operative intervention combined with sequential regimen of doxorubicin and cyclophosphamide chemotherapy suppressed effectively the development of new neoplasm and metastases, but was accompanied by general adverse reactions as lethargy, anorexia, vomiting, hair loss, fever, hypochromic anaemia and strong immunosuppression. Since the tumor size was small, surgical resection alone was carried out successfully in the present case.

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Figures:



Fig1. Pet with mammary tumor



Fig.2: Undermining the subcutaneous tissue

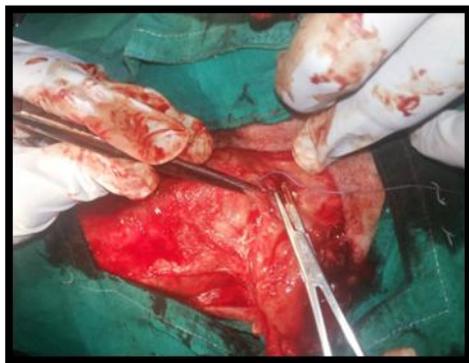


Fig.3:Ligating the inguinal vessels with PGA 1



Fig.4: Excising the another side mass with electrocautery



Fig.5: Resected mammary tumor mass



Fig6: Skin was closed using Prolene 1-0.