

## CASE REPORT

# Successful Surgical Management of Sebaceous Gland Tumours in Dogs

JJ Parmar<sup>1\*</sup>, AI Shah<sup>2</sup>, Neha Rao<sup>3</sup>, DJ Godasara<sup>4</sup>, DM Patel<sup>5</sup>

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Tumors of the skin and subcutaneous tissues are most common in Veterinary practice and account for approximately one-third of all the tumors in dogs (Chikweto *et al.*, 2011). Sebaceous hyperplasia is a most common tumor of the sebaceous gland that occurs in the old age, anywhere on the body as wart-like or cauliflower-like and can become ulcerated because of trauma, while sebaceous epithelioma occurs primarily on the head as a solitary lesion but generalized cases have been reported. The treatment of choice is surgical excision (Max's House, 2005). This paper presents case studies of sebaceous gland tumors in two dogs.

## HISTORY AND CLINICAL EXAMINATION

### Case 1

One-year-old male Labrador dog weighing 24 kg was presented with the history of soft growth on the chin for six months that increased in size gradually (Fig. 1) and was interfering in feeding. Grossly tumor appeared blackish nodular mass covering the lower mandible (Fig. 3). Clinical examination revealed huge, multilobular soft mass with thick base arising from the skin.

### Case 2

Fifteen-year male Pomeranian dog weighing 14 kg was presented with a history of growth on the inner side of the right ear flap (Fig. 2) for last six months. Clinical examination of the mass revealed it a reddish, soft tissue with a very narrow base attached with an ear flap.

Clinically both animals appeared healthy, active. Physiological and hematological parameters were within the normal range. Based on the history and clinical examination, both the cases were diagnosed as tumors and were decided to remove surgically.

## TREATMENT AND DISCUSSION

After preparation of a site for aseptic surgery, both dogs were given Inj. Atropine sulphate @ 0.04 mg/kg subcutaneous as pre-anaesthetic. Pre-operatively, dogs were given Inj. Ringer's lactate 500 mL in case 1 and Inj. Ringer's lactate

<sup>1-3,5</sup>Veterinary Clinical Complex, College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand-388001, Gujarat, India

<sup>4</sup>Dept of Veterinary Pathology, College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand-388001, Gujarat, India

**Corresponding Author:** JJ. Parmar, Veterinary Clinical Complex, College of Veterinary Science and Animal Husbandry, Anand Agricultural University, Anand-388001, Gujarat, India, e-mail: jigneshparmar2000@gmail.com

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250 ml in case 2 along with Inj. Ceftriaxone and Tazobactam @ 15 mg/kg body weight, Inj. Meloxicam @ 0.2 mg/kg and Inj. Etamsylate @ 250 mg/kg body weight intravenously in both cases. General anesthesia was achieved by using Inj. Ketamine hydrochloride @ 5 mg/kg and Inj. Midazolam @ 1 mg/kg body weight and mass was excised by giving an elliptical incision on the base of tumour in both the cases. All the bleeding vessels were ligated using polyglactin 910 No. 2.0, and the skin flap was closed by interrupted suture by Nylon 2.0. From the next day the animals were given Inj. IntacefTazo @ 25 mg/kg and Inj. Meloxicam @ 0.2 mg/kg for 5 days, along with daily antiseptic dressing till healing. The stitches were removed on the twelfth postoperative day. Both the dogs recovered uneventfully. The excised tumor masses (Fig. 2 and 4) were subjected to histopathological analysis, which revealed sebaceous hyperplasia (Fig. 5) in Labrador dog and sebaceous epithelioma (Fig. 6) in Pomeranian dog. Both the animals were kept under observation up to six months for reoccurrence.

Several types of benign skin tumors can develop from skin structures in the dog. Sebaceous gland hyperplasia is



Fig. 1: Tumor on the chin in case 1

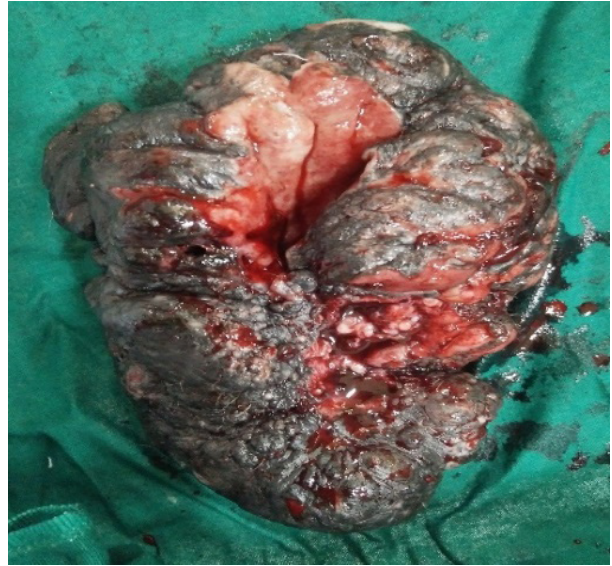


Fig. 2: Excised tumor in case 1



Fig. 3: Tumor in-ear flap in case 2



Fig. 4: Excised tumor mass in case 2

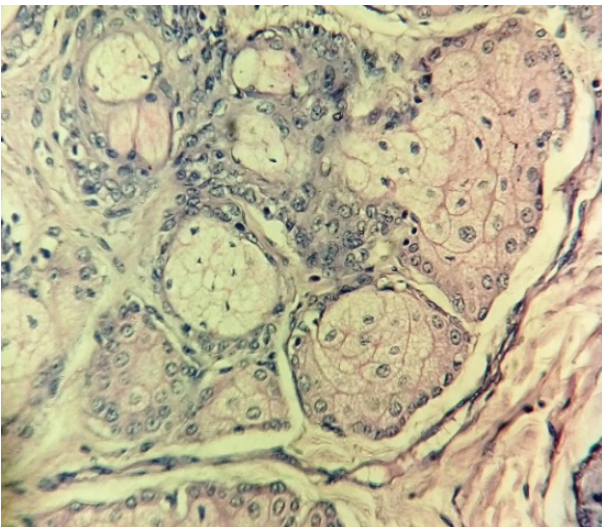


Fig. 5: Histopathological lesions of

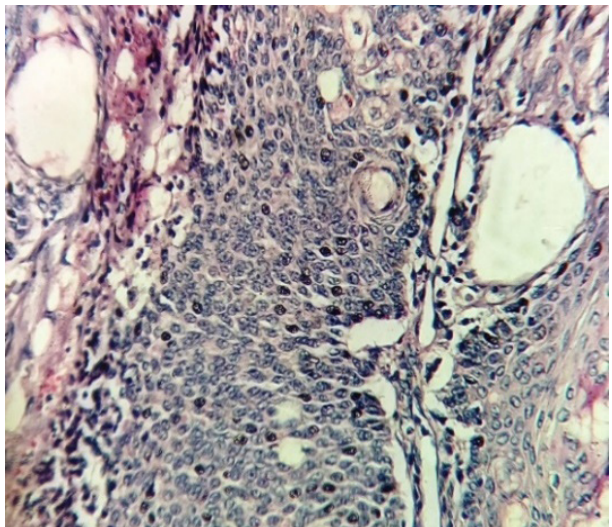


Fig. 6: Histopathological lesions of sebaceous hyperplasia  
sebaceous epithelioma



the small bump that occurs when the entire gland grows larger and pushes up through the surface of the skin as a result of excessive cell division within a sebaceous gland that results in a visible growth on the skin, while sebaceous epitheliomas are growths that develop from only a part of the gland called basal cells. Sebaceous gland tumors can be classified according to the level of cell maturation, such as nodular hyperplasia, sebaceous adenoma, sebaceous epithelioma, and sebaceous adenocarcinoma (Amaravathi *et al.*, 2017). Tumors of the sebaceous glands are located mostly in the head, abdomen, or thorax region (Terim Kapakin, 2008). In both, the present cases tumors were located in head region. Bettani *et al.* (2009) have reported malignant sebaceous epithelioma in 9-year old female Dachshund on upper lip that reoccurred after the excision and metastasized in lungs and central nervous system five months later. Sebaceous epithelioma is an occasionally aggressive tumour that metastasizes to regional lymph nodes and distant organs which can be categorized as low grade malignancy and local recurrence can be seen after surgical excision and characterized histologically by a preponderance of basaloid cells with few well-differentiated sebocytes (Yoon and Park, 2016), while in present cases no reoccurrence was noted.

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