SURGICAL MANAGEMENT OF SEBACEOUS ADNEXAL TUMOUR IN A DOG

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Adnexal tumours of the skin are relatively common among dogs, compared to cats and humans. Canine adnexial tumours can be classified into follicular tumours, nailbed tumours, sebaceous and modified sebaceous gland tumours, apocrine and modified apocrine gland tumours, and eccrine (atrichial) tumours. The development of adnexa is a result of an intimate interaction between basal and mesenchymal cells. Basal cells become the germinative cells of the hair follicle and mesenchymal cells become follicular papilla. Both human and canine adnexal neoplasms sometimes have a complex histological appearance because of their origin of the pluripotent stem cells (Jasik et al., 2009).

An eighteen month old dog was presented to the Veterinary College Hospital, Bangalore with a history of swelling over the left thorax region growing since two months and did not responding to medical treatment. Upon physical examination animal was having pyrexia with 102.8°F, tachycardia and tachypnea. On physical palpation, hard mass was felt, which was free without arraching to scapula suggestive of carcinoma (Fig.1). It was decided for excision under general anesthesia.

Dog was prepared for aseptic surgery and premedicated with Atropine sulphate @ 0.045 mg/kg body weight subcutaneous, preemptive analgesia with pentazocin @ 1 mg/kg intramuscular, sedation with triflupromazine Hcl @ 1 mg/kg intravenous. After 10 minutes, general anaesthesia was induced with 2.5% thiopental intravenously and maintained under halothane oxygen mixture.

Surgical site was painted with Povidone iodine. Two curvilinear incisions were made on the mass in such a way that both incisions were connected on each side to make it crescent shaped. Mass was separated from its attachment by blunt dissection (Fig.2). All bleeding points were arrested by ligation with chromic catgut size-0. Subcutaneous suturing was done with chromic catgut size-0 in simple continuous pattern and skin was opposed with polyamide size-0 in horizontal mattress.

The excised mass upon examination was hard and weighing about 500gms which was preserved in neutral buffer solution and sent for histopathology which was confirmed as malignant adnexial sebaceous gland tumor (Fig.3). Post-operatively, ceftriaxone...
(20mg/kg) was administered for 7 days systemically. Skin sutures were removed on 10th post-operative day and Animal recovered uneventfully. There was no reoccurrence in the period of one year under study.

Fig. 3 – Histopathology of malignant adnexial sebaceous gland tumor.

Yasuno et al., 2009 reported Cutaneous mass at basal region of the ear auricle in a 5-year-old, male Bichon-Frise dog which was diagnosed as canine clear cell adnexial carcinoma. Histologically, the cutaneous neoplasm was comprised of lobules with solid cellular proliferation separated by thin fibrous septa. Similarly Sakuma et al., 2010 reported Cutaneous clear cell adnexal carcinoma in the right lip of a 14-year-old male castrated Shih Tzu and stated Histologically, that the tumor consisted of neoplastic cells with clear or vacuolated cytoplasms and contained frequent tubular structures.

References