

## Anal Sac Adenocarcinoma in an Eleven Year Old Female Terrier: A Case Report

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### Abstract

**Case Description-** An 11 year old intact female white Terrier dog weighing 10 kg with no history of illness was presented to the clinic for routine checkup. In anal sac evacuation a right perianal unilateral mass was recognized as an incidental finding.

**Clinical Findings-** Subsequent problems such as polyuria, polydipsia, dyschezia, tenesmus, poor appetite, and vomiting were not noted. No signs of metastasis were noted in thoracic and abdominal radiography. Biochemical profile showed elevated total calcium, but no other abnormalities were found in complete blood cell count.

**Treatment and Outcome-** The mass was removed surgically by a curvilinear incision and the empty space was closed with 2-0 Vicryl suture material in purse string fashion. Skin was closed with 3-0 Nylon suture material. Histopathological evaluation showed the cells had round to oval normochromic to hyperchromic nuclei, with a prominent nucleolus and a small amount of eosinophilic cytoplasm.

**Clinical Relevance-** In recent studies in dogs with ASAC, clinical findings such as polyuria, polydipsia, weakness or lethargy related to hypercalcemia, and local irritation, tenesmus or constipation associated with iliac lymph node metastasis and enlargement were observed. But in our case there was no history of clinical signs. Most cases were neutered female dogs. Unusually, in our study, the dog has not been neutered. In one study median age at diagnosis was 9.9 years (range, 7.9 – 11.9 years).

**Key words-** Anal sac, Adenocarcinoma, Terrier dog

### Case Description

An 11 year old intact female white Terrier dog weighing 10 kg with no history of illness was presented to the clinic for routine checkup. In anal sac evacuation a right perianal unilateral mass was recognized as an incidental finding. The mass was firm, non-pedunculated and was not painful in palpation.

Anal sac tumors are also called apocrine gland tumors. Perianal glands are modified sebaceous glands and are also known as circumanal tumors and hepatoid tumors. Commonly most of the perianal tumors are carcinoma and adenoma of the apocrine and perianal glands. Anal sac adenocarcinoma which is originated from apocrine gland epitheliums is a malignant tumor. The most common canine perianal tumors are perianal adenomas (80%). They occur more often in intact males than in intact females and are more prevalent in neutered females than in intact females. They are usually small, well circumscribed, raised and may be single or multiple; although, some are ulcerated and large. Most patients have unilateral tumors. The tumor is seen in different breeds of dogs in the age of between 5 and 12 years. The tumor is metastasized (90%) to regional lymph nodes such as iliac, sacral, and sublumbar lymph nodes, although distant metastasis may occur anywhere, but lungs, liver, and spleen are the most common sites. Paraneoplastic syndrome is accompanied with some anal sac adenocarcinomas result in persistent hypercalcemia and secondary renal failure.