

## Apocrine gland adenocarcinoma of the anal sac

Apocrine gland adenocarcinoma of the anal sac (AGAAS) is a malignant tumour that arises from glandular tissue surrounding the anal sac. The tumours are relatively common in dogs, however, are infrequently seen in cats.

### Dogs

The tumours are often associated with paraneoplastic hypercalcaemia and many have metastasised at the time of presentation. Metastasis to the sub-lumbar lymph node(s) usually occurs before metastasis to more distant sites such as the lungs and liver. As a consequence of the disease process, presenting signs may include local effects caused by the tumour or metastases, or polyuria-polydipsia associated with hypercalcaemia. In some dogs, the tumours are found incidentally.

### Diagnosis

A presumptive diagnosis of AGAAS may be made when an enlarged anal sac and or sub-lumbar lymph node is found on palpation. Cytology following fine needle aspiration is often diagnostic. However, in a few cases histology is necessary for diagnosis.

### Prognosis

The prognosis is better when the tumour is small. When tumours are >10 cm in diameter the mean survival time (MST) is about half that seen in dogs with smaller tumours. The presence of hypercalcaemia and metastasis to the sub-lumbar lymph node(s) also significantly reduces MST. That said, treatment protocol also has a significant effect on MST with excision of the affected gland and lymph node (if affected) in combination with chemotherapy ± radiation therapy typically providing the best outcome.

### Cats

In cats with AGAAS the most common clinical signs are perineal ulceration or discharge, with constipation or tenesmus occasionally seen. Histology following excision is recommended because local recurrence after surgical excision is common if tumour margins are incomplete. In cats, the mean survival time is 260 days with a range of 42 to 1390 days (Amsellem *et. al.*, 2019). The efficacy of chemo- and radiation therapy has not been investigated in cats.

**Reference:** PM Amsellem, RP Cavanaugh, PY Chou *et. al.* Apocrine gland anal sac adenocarcinoma in cats: 30 cases (1994–2015). *J Am Vet Med Assoc*, 254:716–22, 2019