ANAL SAC GLAND CARCINOMA IN A CAT

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A perianal mass in a fifteen year old domestic shorthaired cat with a painful subcutaneous swelling in the left ventrolateral perianal region was surgically excised and submitted for light microscopic evaluation. Grossly the mass was 1.8 x 1.1 x 1.0cm, firm, irregular, pale tan, and contained viscous fluid material on cut section. Histologically this was a poorly demarcated, unencapsulated, multilobulated neoplasm that invaded surrounding perirectal skeletal muscle. Lobules were composed of sheets and acinar arrangements of cuboidal neoplastic epithelial cells with scant to moderate eosinophilic to amphophilic cytoplasm and a round or oval nucleus with coarse chromatin. Mitotic figures were two per x40 objective field. Acinar lumina sometimes contained eosinophilic proteinaceous material. Desmoplasia was also present, as were small foci of necrosis with infiltrates of neutrophils, lymphocytes and plasma cells. Neoplastic invasion of lymphatic or blood vessels was not seen. Microscopic features of this mass were consistent with anal sac gland carcinoma. Preoperative hematologic and serum biochemical parameters were within normal limits.

Perianal tumors are common in dogs, with anal sac gland carcinoma the most common malignant neoplasm in this region. It arises from the apocrine glands surrounding the fundus of the anal sac, is usually unilateral and frequently invades local tissues, with metastasis an early feature of the disease that is often present at the time of diagnosis. In cats, however, perianal tumors are rare. To the author's knowledge, this is only the second documented report of anal sac gland carcinoma in a cat.