## Apocrine Gland Anal Sac Adenocarcinoma in a Dog

Jong-Hwa Lee, Kyoung-won Seo, Su-Ji Hong, Cheol-Yong Hwang,
Hwa-Young Youn\*

Veterinary medical teaching hospital, College of veterinary medicine, Seoul National University

Intruduction: Apocrine Gland Anal Sac Adenocarcinoma (AGACA) of canine is a malignant neoplasm that is locally aggressive and frequently metastasize initially to the regional lymph nodes and then to the liver, spleen, lungs, and other sites. AGACA is most commonly seen in the female and is distinct from the male perianal sebaceous gland adenocarcinoma clinically and histologically. Clinical signs of AGACA is varied, and signs relate to the size, region and severity of the tumor at presentation. Dogs with AGACA will often present for systemic signs of hypercalcemia or occasionally obstruction of the pelvic canal from metastasis which is lead to tenesmus, constipation, change in stool shape. Surgery chemotherapy and radiation therapy have been used to treat AGACA. The median survival times with metastasis have been reported as 6 months.

Meterials and methods: a 6-year-old, female mixed dog was presented with depression, anorexia and melena to Medical Teaching Hospital of Seoul National University. Physical examination, complete blood counts, chemistry profile, radiography, ultrasonography, computer tomography(CT), cytology and histopathology were performed.

Results: thoracic radiography showed pulmonary nodules and abdominal radiography showed soft tissue opacity mass in retroperitoneal space, UB and colon. Ultrasonography and computed tomography revealed mass on liver, spleen, retroperitoneal. On histopathology, the tumor were revealed as apocrine gland anal sac adenocarcinoma. The patient was treated with combination of carboplatin and doxorubicin. Additionally, Intradermal fentanyl patch was used to control of cancer pain. The patient died approximately 2 months after chemotherapy.

Clinical relevance: This report describes that AGACA treated with carboplatin and fentanyl for pain control.

<sup>\*</sup> Corresponding author: hyyoun@snu.ac.kr