A case of metastatic colonic adenocarcinoma in German shepherd

Gye-hyeong Woo, Jae-hoon Kim, and In-soon Roh Pathology Division, National Veterinary Research & Quarantine Service

Intestinal adenocacinomas are uncommon in dogs, and they occur most frequently in the colon and rectum of animals averaging 8-9 years old. Also, they have been reported rarely in cattle, goats, horses and swine.

This tumors occur slightly higher in males than in females. Boxers, collies, poodles, and German shepherds are prediposed.

A case of metastatic colonic adenocarcinoma in a 7-year-old, male, German shepherd. This dog shows progressive weight loss, persistent vomiting and diarrhea, anorexia, and emaciation. Other clinical sign was tenesmus. Glossly, the serosa of colon and mesentery contained gray-white, firm tissue mass which measured approximately 10 X 4 X 3 cm. Spleen has protruded pale red round to oval mass which is 2 to 50 mm in diameter. The milky yellow nodules ranging from 2 to 5 mm, were scattered in liver. Pancreas was stickly attached with stomach and peritoneum and has firm nodular mass which is 15 X 5 X 5 cm. Microscopically, the tumor of colon was characterized by solid sheets or nests of well-differentiated to highly anaplastic polyhedral, cuboidal or columnar epithelial cells, which form irregular acinar structures. The neoplastic cells infiltrated into the submucosa, the muscularis and the serosa along lymphatics and vessels. Metastases occurred in stomach, lymph nodes spleen and liver.

Based on the gross findings and histopathologic examination, this tumor was diagnosed as colonic adenocarcinoma.