Clinical Benefits of Surgical Treatment in Dogs with Prostate Adenocarcinoma

Kumiko Ishigaki1; Teppei Fujimoto, DVM1; Hiro Horikirizono, DVM2; Takao Amaha1; Keigo Iizuka1; Takahiro Nagumo1; Kei Tamura1; Mamiko Seki, 1; Yumiko Kagawa2; Kazushi Asano1

1Laboratory of Veterinary Surgery, Department of Veterinary Medicine, College of Bioresource Sciences, Nihon University, 1866 Kameino, Fujisawa, Kanagawa, Japan, 2Northlab, 2-8-35 Hondori, Shiraishi, Sapporo, Hokkaido, Japan

Introduction: Surgical treatment is generally considered to be a palliative procedure and has been not yet demonstrated to produce the survival benefit in canine prostate adenocarcinoma. The purpose of this retrospective study was to compare the outcome among dogs undergoing medical and surgical treatment including total prostatectomy (TP) and total prostatocystectomy (TPC).

Materials and Methods: The medical records of 37 dogs diagnosed with prostate adenocarcinoma were reviewed. The patients were divided into 2 groups: the non-surgical group (non-Sx, n=11) and the surgical group (Sx, n=26), which was subdivided into the TP group (n=18) and the TPC group (n=8) based on the surgical procedure.

Results: Of 37 dogs, 13 (Sx: 8, Non-Sx: 5) had the detectable intrapulmonary nodules by preoperative CT. The status of pulmonary metastasis was not significantly different between the both groups. The median survival time (MST) from the initial evaluation in the Sx (474 days) was significantly longer than that in the non-Sx (99 days). Postoperative MST in the TP group (525 days) was significantly longer than that in the TPC group (138 days). Postoperative urinary incontinence in the TP group was mild (n=14), severe (n=2), and not observed (n=2), whereas all dogs in the TPC group showed severe incontinence.

Conclusion: The surgical treatment for canine prostate adenocarcinoma is suggested to have the survival benefit compared with the medical management including NSAIDs. Especially, TP might be recommended for the improvement of survival time and quality of life in canine prostate adenocarcinomas before the tumor infiltration into the bladder.