Total Prostatectomy as a Treatment for Prostatic Carcinoma in 25 Dogs: a Veterinary Society of Surgical Oncology (VSSO) retrospective study. Tristam C. Bennett¹, Brad M. Matz², Ralph A. Henderson², Rod C. Straw³, Julius M. Liptak⁴, Laura E. Selmic⁵, Francesco Collivignarelli⁶, Paolo Buracco⁷

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Introduction: Prostatic neoplasia is a relatively uncommon diagnosis in dogs. Reported histologic diagnoses include prostatic adenocarcinoma, transitional cell carcinoma and squamous cell carcinoma. Hematuria, stranguria and tenesmus are commonly observed in dogs with prostatic tumors. Surgical treatment has been previously reported but is often avoided due to high complication rates. The purpose of this retrospective, multi-institutional study was to report the signalment, presenting signs, intraoperative/postoperative complications, histologic diagnosis and outcome in dogs treated with total prostatectomy for prostatic neoplasia. We hypothesized total prostatectomy would be associated with a complication rate and survival time similar to other currently available therapeutic interventions.

Materials and Methods: This study was a multi-institutional retrospective case series approved by the VSSO Research Committee. Medical Records were searched for dogs with prostatic neoplasia treated by total prostatectomy.

Results: Twenty-five dogs were treated with total prostatectomy. A palpably enlarged prostate was the most common physical examination finding. Urethrourethral and cystourethral anastomosis were the most common anastomotic techniques. All dogs survived to discharge from the hospital. Major complications occurred in 4 dogs. Permanent urinary incontinence occurred in 8 dogs. Extracapsular tumor extension was significantly associated with shorter median survival time (MST). The overall MST was 231 days.

Conclusions: The complication rate reported here is less than some of the previously reported data regarding prostatectomy. Careful case selection is important when considering cases for surgical treatment.