A case of transitional cell carcinoma in the vagina
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A seven-year-old spayed female Wirehaired Pointing Griffon presented to Auburn’s neurology service for inappropriate urination and defecation for the past year. The owner had also noted vaginal discharge. Neurologic examination and magnetic resonance imaging (MRI) were performed and no abnormalities were noted. The patient was evaluated for evidence of an ovarian remnant due to intermittent vaginal discharge and inconclusive results of an abdominal ultrasound examination. The theriogenology service attempted a vaginal examination and cytology, but the patient was extremely fractious and both were unsuccessful. These procedures were repeated successfully when the patient was under general anesthesia for the MRI. Upon digital palpation a mass was located at the junction of vestibule and vagina and pain was evident even under general anesthesia (tachypnea, tachycardia). Vaginal cytology and luteinizing hormone and progesterone assays were used in combination and revealed no evidence of an ovarian remnant. Cytology of the vaginal smear suggested a sarcoma. Vaginoscopy was performed in order to obtain a more diagnostic sample of the mass and histopathology revealed a possible adenocarcinoma.

Six days later, the patient returned for complete excision of the mass. During surgery the goal of complete excision changed to maintaining proper anatomical function of the urethra. Final diagnosis of the mass revealed a transitional cell carcinoma (TCC), papillary and infiltrating vaginal mass at the urethral papilla. The margins were incomplete, and the oncology service recommended peroxicam and mitoxantrone with fractional radiotherapy.

Urinary bladder tumors are usually TCC while vaginal tumors are more commonly leiomyomas.1–3 The mean survival time for animals using this chemotherapy protocol was 326 days. But, the overall survival time was not superior unless mitoxantrone, piroxicam and radiation were used together.4

This patient was unusual because of the location of the TCC. Animals with persistent urinary problems, whether urinary tract infections or incontinence, that seem refractory to conventional therapy warrant further evaluation and a digital vaginal examination should be considered. Unexplained lower back pain may need to be explored further with a rectal and vaginal examination.

Selected references