# Ultrasound-guided endoscopic laser ablation of urothelial carcinoma 



Procedure: This minimally invasive procedure is performed under anesthesia. Using a cystoscope, a laser fiber is used to debulk cancer (UC; aka transitional cell carcinoma [TCC]) within the urethra and urinary bladder. Simultaneous ultrasonography is used to guide the laser, and to assess the extent of tissue damage.

Indications: UC within the urethra and at the trigone; patients with substantial difficulty voiding or complete outflow obstruction are suitable candidates. This procedure is not thought to prolong survival in dogs with non-obstructive lesions.

Patient eligibility (species, size, gender): Female dogs must be able to accommodate a rigid cystoscope (generally $>5 \mathrm{~kg} / 11 \mathrm{lbs}$ ); Male dogs must be large enough to accommodate a flexible scope (generally > $8 \mathrm{~kg} / 17 \mathrm{lbs}$ ).

Cost: \$3500-5000, depending on duration of procedure. Pre-operative evaluation may be necessary (labwork, thoracic radiographs, etc.) and will incur additional costs. Pre-operative costs are higher for dogs unable to urinate at presentation.

Length of stay: Most patients are discharged within 24 hours.
Complications: Risks include perforation (uncommon, but can be life-limiting), infection and seeding (spreading) of the cancer within the urinary tract.

Anticipated outcome: This is palliative, not curative. Most dogs experience a 2-4 month improvement in clinical signs (difficulty emptying, excessive straining, etc). The procedure can be repeated as needed. Adjunctive therapy (e.g., nonsteroidal anti-inflammatories, chemotherapy, radiation) is strongly recommended.

## Texas A\&M Interventional Radiology \& Endoscopy Service

Genna Atiee DVM, Diplomate ACVIM Assistant Professor

Audrey Cook BVM\&S, MRCVS
Diplomate ACVIM, ECVIM, ABVP (Feline)
Professor and Chief of Service
Michelle Hervey BS
Licensed Veterinary Technician

Questions? Please contact guidewire@cvm.tamu.edu

Small Animal Hospital

