Ectopic Ureter

What is an ectopic ureter?

Some dogs are born with an abnormality of their urinary system known as an "ectopic ureter." This abnormality allows urine flowing from the kidney to bypass the urinary bladder and enter in an abnormal location resulting in constant urine leakage. Usually involuntary urine dribbling is noticed at a very young age (eg; a few months of age) or when dogs are being house broken. Females and certain breeds (eg; Labrador, Golden Retriever, Husky) are predisposed. This condition is not usually harmful to their overall health and these patients are normal puppies otherwise.

How is an ectopic ureter diagnosed?

Often, a young dog (less than 10-12 months of age) is suspected to have an ectopic ureter based on clinical signs, breed, and age. The best method of diagnosis is to perform a scope of the lower urinary tract (cystoscopy). Other diagnostic tests that can sometimes be helpful when making the diagnosis are an abdominal ultrasound (ie; sonogram) and/or a CT scan.

How is an ectopic ureter treated?

Most dogs have an "intramural" ectopic ureter, meaning that their ureter tunnels along the wall of the bladder and urethra. When this occurs, it allows for treatment with "laser ablation" during the scope procedure. If a dog is in the 5-10% of patients that have an "extramural" ectopic ureter, then a surgery would be required to treat the ectopic ureter(s)

What is the typical process for having my dog evaluated for an ectopic ureter and undergoing treatment?

In most cases that we strongly suspect an ectopic ureter, we would prefer to evaluate these patients with plans to perform the cystoscopy (scope of the bladder and urethra) for diagnosis on the same day of the appointment. If an ectopic ureter is identified then we can go forward with treatment via "cystoscopy guided laser ablation" ideally at the same time. There may be situations that are more challenging and require additional diagnostics (eg; CT scan). Additionally, there may be times when our schedule or the necessary equipment needed for these procedures does not allow for a same day evaluation, cystoscopy, and laser ablation.

What is required before I can bring my dog in for ectopic ureter evaluation?

- Urinalysis and urine culture performed within 2 weeks of your appointment at the MU VHC. If the urine culture is positive, your dog should be on an appropriate antibiotic for a minimum of 5 days prior to their appointment at the MU VHC.
- If your vet is not able to obtain a urine sample from your pet (which is common in dogs with ectopic ureters), we recommend starting an antibiotic (eg; amoxicillin or Clavamox) approximately 5-7 days prior to your appointment at MU VHC.

What do I need to know before my appointment at MU?

- Do NOT feed your dog after 10 pm the night before your appointment. They can have water up until the time when you begin traveling to MU the morning of your appointment.
- We try to evaluate your dog and perform the procedure in the same day. However, we never know what time the procedure will occur that day or how long it will take. Therefore, we recommend that you plan to spend the entire day (from 9 am to approximately 6 pm) in Columbia.
- Occasionally, patients will need to stay overnight after their procedure, but most will be discharged the evening of their appointment and procedure (before 6 pm).

What is the cost of this procedure?

- Cystoscopy alone: $1200-1500
- Cystoscopy + laser ablation: $2500-3000
  ** These estimates include the exam fee, any pre-anesthestic blood testing, anesthesia, and any medications prescribed.

What is the recovery from the scope and laser ablation procedure?

- This is considered a minimally invasive procedure that does not require any incisions or sutures. Therefore, there are no restrictions following the procedure in regards to activity.
- Some dogs may have mild discomfort when urinating and/or blood in their urine for 1-3 days following the procedure due to inflammation and irritation from the scope.

What is the prognosis for dogs that undergo laser ablation for management of ectopic ureter(s)?

- The laser ablation procedure is extremely successful for correcting the abnormally positioned ureter. However, most dogs with ectopic ureter(s) have other urinary tract abnormalities that may cause them to continue to have urinary incontinence following correction of the ureter(s). These include reduced urethral tone, short urethra, intrapelvic bladder, reduced bladder muscle tone, and renal abnormalities.
- Most dogs will have significant improvement in their urinary incontinence following the procedure. However, some dogs (~50%) may need the addition of medications to help strengthen urethral tone (eg; PPA) to make them fully continent. There are some dogs that even with the procedure and the addition of medications (~20-30%) may still continue to have urinary incontinence (although it should be improved!).
- There are many female dogs (that do NOT have ectopic ureters) that develop urinary incontinence after their spay. This is known as “spay incontinence” and can be treated with medications to help strengthen urethral tone. This may occur in dogs with ectopic ureters that were fully continent and then become incontinent again after their spay.

Can my dog be spayed at the same time that the laser ablation procedure is performed?

- Unfortunately, no. A spay cannot be performed at the same time as the laser ablation procedure.
- We do not recommend spaying dogs with ectopic ureters until they are ideally approximately 1 year old and/or have undergone one heat cycle (usually at ~8 months for most female dogs) to help strengthen urethral tone.