

## ER VET & CASE OF THE MONTH



*Dr. Bob Kenn was raised on a farm in southwestern Ontario. He graduated from the Ontario Veterinary College in 1985 and practiced emergency medicine until 1988 at which time he became a partner at a veterinary hospital in downtown Toronto. Bob has been certified as a specialist in Canine and Feline Practice by the American Board of Veterinary Practitioners since 1991. In 2005 he sold his partnership interest and joined a general and referral practice in Scarborough where he enjoyed working with other specialists until 2009 when he joined the staff of the VEC as a primary admitting veterinarian. Bob enjoys the challenges and pace of emergency medicine as well as the opportunity to interact with a variety of specialists on a daily basis to provide the best of veterinary care for his patients. His professional interests include internal medicine, soft tissue surgery, ophthalmology and dentistry. Bob shares homes in Toronto and on the Rideau Canal north of Kingston with his wife Lynn and four legged "children": Cricket and Lucy (two English Bulldogs) and Tiramisu (a Birman cat). His interests outside of veterinary medicine*

*include boating, kayaking, travelling by bicycle (both at home and abroad), gardening, woodworking and cooking.*

### **Dr. Bob Kenn's ER case:**

#### ***Effective Use of Coccygeal Epidural for Relief of Urethral Obstruction in a Cat.***

An 11 year old male neutered DLH feline patient was presented to the VEC after being transferred from the referring DVM with a history of urethral obstruction and inability to urinate.

Physical examination revealed mild tachycardia and a non-expressible turgid but normal sized urinary bladder. Diagnostics at the time of admission revealed a mild metabolic acidosis, mild hyperglycemia, normal BP and normal blood gases and electrolyte levels with the exception of a slight hypochloremia. Intravenous fluid therapy was initiated.

Sedation with diazepam intravenously allowed flushing and passage of a 3.5 Fr polypropylene urinary catheter past an area of grit that was evident in the urethra 2 to 4 cm proximal to the tip of the penis and into the urinary bladder. Due to extreme urethrospasm the urinary catheter could not be removed from the urethra. Additional sedation with diazepam, instillation of a small amount of dilute lidocaine into the

urethra using a 24 gauge IV catheter placed between the urethral mucosa and the urinary catheter, and induction, intubation and maintenance of anesthesia with isoflurane did not alleviate the urethrospasm. The bladder was lavaged with 250 ml of sterile saline during the anesthesia. Radiographs did not reveal any evidence of renal, cystic or urethral calculi.



A coccygeal epidural using 0.5 ml of 2% lidocaine solution was placed at S3-C1 (technique described in "Coccygeal epidural with local anesthetic for catheterization and pain management in the treatment of feline urethral obstruction. " J Vet Emerg Crit Care. February 2011;21(1):50-2. Angela K O'Hearn<sup>1</sup>; Bonnie D Wright).

Although there was still some resistance to removal of the urinary catheter after the epidural had taken effect it was successful. Examination of the urinary catheter after removal revealed a 1 cm section of the catheter located approximately 3 to 4 cm proximal to the site of entry into the urethra that was coated by a significant band of gritty and mucoid material that was tightly adherent to the urethral catheter. This material was collected and held for submission and analysis to a urolith analysis centre by the referring veterinarian. Placement of a 3.5 Fr Mila urinary catheter was uneventful and the urethra was readily flushed and lavaged multiple times prior to suturing a closed urinary collection system in place.

The patient recovered uneventfully from the general anesthesia. A CBC was consistent with a stress leukogram; a biochemical profile revealed moderate azotemia, moderately severe hyperphosphatemia and mild hyperkalemia; urinalysis revealed hematuria and proteinuria but no evident crystalluria. Ongoing treatment consisted of prazosin as an antispasmodic, transmucosal buprenorphine for pain control and acepromazine and amitriptyline for anxiety and sedation. The closed urinary collection system and catheter were removed after a period of 30 hours. After urinary catheter removal the patient continued to urinate on his own and maintain a small bladder over a period of 12 hours prior to transfer back to the referring veterinarian for ongoing care and evaluation.

This case illustrates the effectiveness of coccygeal epidural as part of the treatment of urethral obstruction in feline patients.

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