

WARNING: A trip to the restroom may be in order before reading this column.

Let's face it, when you have to go you have to go. The dilemma faced by some unfortunate cats is that when they have to go-they can't. Urinary tract blockage in cats is a common and challenging problem for veterinarians, not to mention a painful and potentially life threatening condition for the affected feline.

The inability to void urine usually results from an obstruction of the urethra, the very small diameter (1 millimeter or less) tube that carries urine from the bladder to outside the body during urination. While urethral obstruction is theoretically possible in both male and female cats, in reality it is almost exclusively a male cat problem. This is because the male urethra is several times longer than that of the female.

Various things can cause urethral obstruction. Aggregates of mineral that have formed in the urine are the most common culprits, but thick gel or mucous-like plugs can also be a problem. Less commonly, scar tissue from previous injury or surgery, soft tissue swellings, or even tumors can cause a narrowing or occlusion of the tiny urethra.

Regardless of the cause, urethral obstruction is a serious medical problem that can have life threatening consequences within hours. If urine cannot be voided, certain metabolic wastes cannot be removed from the body. High levels of these waste products will accumulate in the body causing reduced appetite, vomiting, diarrhea, mental depression, weakness, and heart rhythm problems. If untreated, these cats become progressively weak and die. An especially troubling fact is that this condition, without exception, is a very painful disease. The kidneys upstream continue to make urine and the urinary bladder fills to a point that is very tight and painful. In fact most veterinarians recognize this condition from the painful howling that ensues when the cat's abdomen and painfully over distended bladder is touched. As a point of reference, the normal cat bladder is about the size of a golf ball. After a few hours of urethral blockage the distended bladder can feel more like a large orange!

It shouldn't surprise many that treatment of urethral blockage requires unblocking the cat's urethra. But while relieving the obstruction is important it isn't necessarily the first task at hand when presented with this problem. Remember, these cats have been unable to void waste products. These waste products can cause electrolyte (sodium, potassium, etc), acid/base, fluid balance, and heart rhythm derangements that, if severe, will need immediate attention, even before attempting to open up the urethra. Frankly, some of these cats are barely alive on presentation. Our nurses know the first thing the doctors want in these patients is an intravenous line so fluids and medications can be started. Blood tests and an EKG may be needed as well. Once the patient is stable, we can get busy unplugging his urethra. With the obstruction relieved, we usually place a small urinary catheter or tube in the urethra that reaches all the way to the bladder. We will usually secure this in place and hospitalize the patient for one to three days to be sure the cat can void urine while recovering from all the derangements mentioned above. This may well be one of veterinary medicine's most rewarding moments; to see a cat come in so painful and sometimes near death and within a few hours sitting up, grooming himself and feeling good enough to complain about what's being offered for dinner.

These newly free flowing cats aren't out of the woods yet though. When the urinary catheter is removed one to three days later some will re-obstruct. We feel this may be due to residual mineral "grit" in the bladder or possibly from the urethra simply

being swollen and therefore still quite narrowed. Sometimes medications can help with these problems but other times the urethral catheter needs to be replaced.

Why some cats form these urethral “plugs” and some don’t is not fully understood. Many factors such as genetics, stress, infection may play a role. Diet may also play a role in some cats. This is why the pet food industry markets and sells so much cat food labeled as “...good for urinary tract health.” The fact is that in some cats these diets won’t help at all, and may even predispose some cats to urethral obstruction. It’s best to consult your pet’s doctor about dietary management of any urinary problem. Some medications have been suggested to prevent or treat this problem but few, if any, have proven effective in all cats. The take home message here is each case of feline urethral obstruction is unique, and each needs individualized treatment.

If you notice your cat taking extra trips to the litter pan, or staying there longer than usual, don’t delay in having him checked out by your veterinarian. While he may initially begrudge a trip to see his doctor (who doesn’t?), he’ll thank you in the end if you can spare him the painful and dangerous experience of complete urethral obstruction.

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