

## What is Feline Lower Urinary Tract Disease?

Feline lower urinary tract disease (FLUTD) describes a variety of conditions that affect the bladder and urethra of cats. Cats with FLUTD most often show signs of difficulty and pain when urinating, increased frequency of urination, and blood in the urine. Cats with FLUTD also tend to lick themselves excessively and may urinate outside the litter box, often on cool, smooth surfaces like a tile floor or a bathtub.

While FLUTD can occur at any age, it is usually seen in middle-aged, overweight cats that get little exercise, use an indoor litter box, have little or no outdoor access, or eat a dry diet. Factors such as emotional or environment stress, multi-cat households, and abrupt changes in daily routine may also increase the risk that a cat will develop FLUTD.

### Major Signs of Lower Urinary Tract Disease include:

- Straining to urinate
- Frequent and/or prolonged attempts to urinate
- Crying out while urinating
- Excessive licking of the genital area
- Urinating outside the litter box
- Blood in the urine

Note that cats with a **urethral obstruction** will also show these signs but will pass little or no urine and become increasingly distressed. *A urethral obstruction is an emergency and requires immediate veterinary treatment.* (See section on *Urethral Obstruction*.)

### How is FLUTD diagnosed?

Because FLUTD has many causes, it can be difficult to diagnose. Based on your cat's symptoms, your veterinarian will do a physical examination and most likely will run a urinalysis. If the cause is still not identified, tests such as bloodwork, x-rays, and additional urine tests may be recommended.

### What are the most common causes of FLUTD?

#### *Urolithiasis (Urinary Stones)*

One possible cause of FLUTD is the formation of urinary stones, also called uroliths. These are collections of minerals that form in the urinary tract of cats. X-rays or ultrasound are usually needed to diagnose urinary stones. While a special, stone-dissolving diet is often prescribed to eliminate the stones, more aggressive treatment is needed for those that cannot be dissolved through changes in diet. For example, a veterinarian may help a cat pass stones by flushing its bladder with sterile fluids. If this fails, or if stones recur, then surgery may be necessary. A veterinarian may then recommend medication or dietary changes after surgery to help prevent recurrence.

#### *Urethral Obstruction*

The most serious problem associated with urinary function is when a cat's urethra becomes partly or totally blocked.

Urethral obstruction is a potentially life-threatening condition caused either by urethral stones or by urethral plugs (the latter are made of a soft material containing minerals, cells, and mucus-like protein).

Male cats (neutered or intact) are at greater risk for urethral obstruction than females because their urethra is longer and narrower. This is a true medical emergency, and any cat suspected of suffering from this condition must receive *immediate veterinary attention*. Once the urethra becomes completely blocked, the kidneys are no longer able to remove toxins from the blood or maintain a balance of fluids and electrolytes in the body. Without treatment, death frequently occurs when these imbalances lead to heart failure — often in less than twenty-four to forty-eight hours.

Treatment of this condition involves dislodging the obstruction, usually accomplished by flushing a sterile solution through a narrow tube placed into the urethra. Once the obstruction is removed, further treatment depends upon the condition of the cat. Dehydration and electrolyte imbalances are treated with intravenous fluid therapy. Antibiotics may be given to prevent or treat infection, and drugs that help restore bladder function are sometimes recommended.

For cats who continue to experience urethral obstruction despite medical treatment, there is a surgical procedure called a perineal urethrostomy. Since side effects of this surgery can include bleeding, narrowing at the surgical site, urinary incontinence, and a greater incidence of other kinds of bladder diseases, it is usually considered only as a last resort.

#### *Feline Idiopathic Cystitis*

Feline idiopathic cystitis (FIC)—also called interstitial cystitis—is the most common diagnosis in cats with lower urinary tract disease. The disease is not fully understood and may involve several body systems in addition to the urinary system.

Stress and diet changes can increase the risk of FIC. As many as 40-50% of cats will have another episode of FIC within one year, but veterinarians cannot predict which cats will have relapses. The disease can be chronic and very frustrating for the cat, the owner, and the veterinarian. The current goals of treating cats with FIC are to decrease the severity and frequency of episodes.

### What can I do at home to prevent future occurrences of FLUTD?

Fortunately, most cats recover from FLUTD and never, or only occasionally, develop it again. In some cats, however, the



condition often reoccurs. To help reduce the chances of recurrence:

- Feed small meals on a frequent basis.
- Consult with your veterinarian about the best diet for your cat. Many commercial diets are acceptable, but some urinary conditions respond better to specialized diets.
- Provide clean, fresh water at all times.
- Provide an adequate number of litter boxes (usually one more than the number of cats in the household).
- Keep litter boxes in quiet, safe areas of the house.
- Keep litter boxes clean.
- Minimize major changes in routine.

## And Now A Note On Your Pet's *General Good Health*

*A healthy pet is a happy companion. Your pet's daily well-being requires regular care and close attention to any hint of ill health. The American Veterinary Medical Association suggests that you consult your veterinarian if your pet shows any of the following signs:*

- Lumps or swelling
- Reduced or excessive appetite or water intake
- Marked weight loss or gain
- Limping, stiffness, or difficulty getting up or down
- Difficult, discolored, excessive or uncontrolled waste elimination (urine and feces)
- Abnormal discharges from any body opening
- Head shaking, scratching, licking, or coat irregularities
- Changes in behavior or fatigue
- Foul breath or excessive tartar deposits on teeth

*Pets age more rapidly than people and can develop disease conditions that can go unnoticed, even to the most attentive pet owner. Veterinarians are skilled in detecting conditions that have gradual onset and subtle signs. Early detection allows problems to be treated most easily and affordably. Help foster early detection and treatment by scheduling regular examinations.*

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