



We understand how significant your pet is to your life.

CARING FOR FELINE LOWER URINARY TRACT DISEASE (FLUTD)

- I. Cystitis or FLUTD** is an inflammation of the bladder that may be the result of many causes, including inflammatory (viral, bacterial, interstitial), bladder stones, tumor/growths, congenital structural abnormalities, or most commonly may be idiopathic, which means that a cause cannot be determined. Recent research has shown that very little is known about many of the causes of cystitis, and even less is known about appropriate treatment. In fact, many acute cases of cystitis will resolve in 10 days without treatment. Therefore, many of the treatments we considered successful may have not had any effect at all.
- II. Clinical signs** or behaviors indicative of FLUTD include straining, bloody urine, vocalization/crying while urinating, urinating outside of the litter box, and frequent trips to the litter box with minimal urine output.
- III. Diagnosis of FLUTD:** Urinalysis is necessary to look for signs of inflammation in the bladder, such as red blood cells, bacteria, and crystals. If the urinalysis is normal and the only clinical sign was urination outside the box, the diagnosis WAS behavioral. NOW research has shown that cats with FLUTD will intermittently have normal and inflamed urine samples, therefore more diagnostic tests may be necessary. Other tests include urine culture and sensitivity, abdominal radiographs, and ultrasound of the bladder and kidneys for stones that are not apparent on radiographs. Ask about a special FLUTD workup package if you would like to be aggressive about determining the cause.
- IV. Bladder Stones:** Most of the previous emphasis of treatment was on preventing bladder stones or crystals. (Crystals form when minerals solubilize in the urine. When crystals aggregate, they form larger stones). Crystals and stones are very serious because they can cause a blockage of the urinary tract, particularly in male cats. This can lead to toxic waste being retained and can eventually cause death within 72 hours if your cat is not relieved of the obstruction. It is now known that bladder crystals or stones comprise only 21% of FLUTD cases. Two types of stones are predominant – magnesium ammonium phosphate (MAP, also known as “struvite”) stones and calcium oxalate stones. Normal urine pH is acidic (6-6.5). If the pH level is altered and becomes less acidic, the natural elements (magnesium and phosphorus) found in urine become less soluble and can form crystals. Some of these crystals and larger stones can be dissolved with a prescription diet that acidifies urine and is low in magnesium and phosphorus (Hill’s s/d). Many commercial cat foods add acidifiers as a preventative; however, this has instead promoted the growth of calcium oxalate crystals, which form in acidic urine. These crystals are difficult to dissolve, and most often require surgical removal. Recurrence of calcium oxalate stones can be prevented in some cases by creating a neutral urine with a special diet such as Hill’s k/d.
- V. Treatment** depends on the cause of the FLUTD. Please remember that the cause cannot always be determined. General recommendations include changing the diet to canned instead of dry food to utilize the flushing action of extra water through the urinary tract, and using anti-inflammatories for the bladder if the patient is in pain. If the condition does not resolve in 10 days, then further treatment may be warranted. Some brands or types of cat food that were previously recommended may no longer be appropriate, so please talk to your veterinarian about which foods are best for your particular cat.

The many unknowns of FLUTD probably make this a confusing handout to read. To add more frustration to this situation, if your cat is prone to FLUTD, recurrence is common. At Family Pet Animal Hospital we feel it is important to keep you informed of recent advances and setbacks in veterinary medicine. Please don’t hesitate to consult your veterinarian if you have any questions.