

Idiopathic Feline Lower Urinary Tract Disorder (FLUTD)

FLUTD is a disease of the urinary tract causing affected cats to make frequent, straining attempts to urinate, often accompanied by blood in the urine. It may be a recurrent problem in cats of any age or sex. It is particularly troublesome and obvious in male cats because it may result in blockage of the urinary tract, preventing normal elimination of urine. Complete blockage of the urinary tract is a medical emergency. Cats obstructed longer than 12 hours become toxic. After 36 hrs of obstruction, cats are critically ill and may die.

Normal urinary tract anatomy

The kidneys filter the blood to produce urine, which contains waste products that must be eliminated from the body. Urine passes through small tubes (ureters) to the bladder which functions as a bag for storage of urine. Urine exits the bladder and body through the urethra. The urethra and bladder are the sites of urinary tract inflammation and obstruction in FLUTD.

What causes urinary tract obstruction in FLUTD?

The obstruction is caused by an accumulation of mucus, proteins, blood and sometimes crystals and bacteria. In FLUTD these substances can aggregate into particles capable of plugging the urethra.

What causes FLUTD?

The exact cause of this disorder is still unknown (this is what “idiopathic” means), but is likely multifactorial in origin. It has been associated with the following factors, none of which is considered a sole factor important in every case.

- Obesity
- Lack of exercise
- Stress
- Low water intake
- Dry food
- Any condition that may promote urine retention (i.e. a dirty litter pan)
- Anatomical problems (small urethra, bladder defects)
- Bladder injury
- Viral infections

Recent research has found a similarity between FLUTD and a disorder in women known as interstitial cystitis. Based on these similarities, veterinarians have begun using some human medical therapies that have shown promise in controlling the symptoms of FLUTD. These include the use of *metacam* - an anti-inflammatory and painkiller and *glycosaminoglycans*, which may help in the healing of the inflamed urinary tract. Antibiotics are prescribed if bacterial infection is suspected.

Signs of FLUTD

The most frequently recognized sign of FLUTD is increased urgency to urinate. A previously well-housebroken cat that suddenly violates its training is typical. Affected cats will often urinate in sinks, bathtubs, on floors, in plants, in beanbag chairs and even on owners. Some affected cats will use their box more than 50 times a day. Despite the frequent attempts to urinate, only small quantities- even just drops of bloody urine are passed. Affected cats typically become lethargic, want to hide, and may lose their appetite. Many male cats will incessantly lick their penis and cause severe trauma to the external urethral opening.

Urinary Tract Obstruction

A cat that is completely obstructed will quickly become toxic. Typically the obstructed cat is depressed, vomits, becomes dehydrated and cries when attempting to urinate. He may object to his owner lifting him by the abdomen. If obstruction persists for more than 12 hours, it is a medical emergency. The cat may collapse, have difficulty regulating its body temperature, have seizures, labored respirations, and finally die.

Obstructed cats must be hospitalized and sedated in order to have the urethral obstruction removed. A

urinary catheter will be placed and the bladder flushed. Intravenous fluid therapy is usually necessary. The IV and urinary catheters will remain in place for 2-3 days to help assure that the obstruction will not recur. A urinalysis will be run and x-rays and bloodwork may be necessary. Most cats will go home with medications and a special diet to help prevent reobstruction.

Chronic medical management of FLUTD

The following are general care instructions to which your veterinarian may add special instructions tailored to your particular cat.

1. Make sure your cat is urinating. Scoop the litter box daily to encourage frequency of urination. It is best to provide a litter pan for each cat.
2. Provide free choice, clean, fresh water that is changed daily. Some cats prefer running water or drinking from unconventional containers.
3. Use all medications exactly as prescribed by your veterinarian, even if your cat's condition seems to have improved.
4. Feed at least part of your cats diet as canned food. Your vet may recommend a prescription diet.
5. Minimize stress factors such as sudden changes in environment, emotional upsets, and obesity.

Recurrence of FLUTD

Some cats have severe bouts of recurrent FLUTD despite all efforts. Further diagnostic evaluation would include a complete physical exam, blood and urine tests, x-rays and ultrasound. In some cases special x-rays using contrast media will provide better definition of anatomical defects. Sometimes tumors, bladder wall defects or bladder stones are identified and are best treated surgically.

Conclusion

It should be remembered that 90% of all cats are not affected by FLUTD. There is no reason to restrict the diet of a cat that has never been affected by FLUTD. Increasing water consumption and feeding canned food may provide the best ways of preventing recurrence.