



Feline Urologic Syndrome (FUS) Feline lower Urinary Tract Disease (FLUTD)

What is FUS / FLUTD?

FUS or FLUTD is a term that describes a condition that affects a cat's urinary system.

Symptoms include:

- Bloody urine
- Straining to urinate (can often be mistaken for straining to defecate)
- Urinating small amounts
- Urinating in unusual places
- Urinary obstruction (almost exclusively a male cat problem)
- Crying while in the litter box
- Excessive genital grooming (due to pain)
- Increase frequency of urination

FLUTD affects approximately 1% of the cat population and the average age of cats with FLUTD is 4 years old. Once a cat has displayed symptoms of FLUTD the likelihood of recurrence is between 30 and 50%. The disease can be more serious in males than females because of the possibility of urinary tract obstruction. This is a medical emergency and can become life threatening.

What causes FUS / FLUTD?

In over 50% of the cases, a cause for FUS / FLUTD cannot be found. Bacteria, viruses, bladder crystals or stones, tumors, nerve damage and birth defects can all contribute to the development of FUS / FLUTD. Another important factor is diet, especially those that are high in magnesium and phosphorus. Obesity can also predispose a cat to develop FUS / FLUTD. Eating more food means excreting more minerals into the urine. Since cat urine is so concentrated, there is a greater chance for these minerals to form crystals. Males, especially castrated males, have an extra worry with crystals. Their urethra narrows a great deal at the end of their penis where they are more likely to develop an obstruction.

What is the treatment for FUS / FLUTD?

1. The treatment depends on the results of a physical exam and urine analysis. It may require a change in diet, or use of antibiotics, pain medication, urinary acidifiers or antiseptics, anti-spasmodics or a combination of medication. For the medication to be effective, it must be given faithfully for a number of weeks. Failure to do so can result in a recurrence or prolonging of the symptoms, and can even lead to kidney infections and kidney failure.
2. The urine should be re-tested 5 to 7 days after starting the treatment and again 4 to 5 days after finishing the medication if it is not normal at the first recheck.
3. Urine may be collected at home in an empty litter pan lined with plastic or a box filled with plastic beads which are available at the clinic. Bring the sample to the clinic as soon as possible, the fresher the better – you can refrigerate it for up to 2 hours.

4. Your cat may have to come in for an appointment to have urine collected or stay at the clinic for a few hours to have urine collected if you are unable to obtain it at home. Confining the cat in a carrier for a few hours prior to the appointment will make it more likely for us to obtain a urine sample.
5. If treatment is ineffective it may be necessary to withhold medication for several days and have a sterile urine sample collected at the clinic for bacterial culture and antibiotic sensitivity testing. This helps us determine what antibiotic will work the best. At the same time it is often necessary to have an x-ray or ultrasound of the urinary bladder with the cat under light anesthesia to check for possible urinary bladder stones, tumors, polyps or birth defects in the bladder. In some cases, this may require light sedation.
6. Plenty of clean, fresh, room temperature water in clean dishes should be provided.
7. Thoroughly clean the litter box each day. Use generic or scoopable litter, avoid those with deodorant added as they may make the cat avoid the box.
8. Changing from a dry to a canned food can increase the cat's intake of water to help "flush out" the kidneys.
9. Cats that do have a urethral blockage require hospitalization and anesthesia to relieve the obstruction. Some male cats with repeated episodes of urethral blockages benefit from surgery. The procedure creates a larger opening through which they urinate - essentially the same as a female cat. Although this might increase their chance of bladder infections, it nearly eliminates the chance for repeated blockages.

Suggested foods that are low in magnesium and phosphorus

From pet shops:

Iams
Eukanuba
Feline Science Diet, canned or dry

From veterinarians:

Hill's Prescription Diet c/d, canned or dry
Hill's Prescription Diet s/d, canned or dry
Royal Canin Urinary SO