



## Feline Lower Urinary Tract Disease (FLUTD)

### What is feline lower urinary tract disease?

FLUTD is a term used to describe a collection of conditions that affect the bladder and urethra of cats. It can cause pain and difficulty urinating, sometimes blood in the urine, and in some cases complete blockage and inability to pass urine.

### What causes feline lower urinary tract disease?

Many conditions can affect the lower urinary tract and cause signs of FLUTD, such as:

- Urinary stones
- Urinary tract infections (UTIs)
- **Feline Idiopathic Cystitis (FIC)** – 60-70% of FLUTD cases are “idiopathic”, meaning no underlying cause can be found to explain the bladder inflammation a cat has, but the following are thought to contribute:
  - A defective bladder lining that fails to protect the bladder from urine waste products
  - Inflammation generated by the nerve endings in the bladder
  - Stressful environment or experiences
- Bladder tumours

Some cats are at higher risk of the idiopathic form (FIC), and these include:

- Cats sharing a household with another cat\*
- Indoor-only cats
- Obese or overweight cats
- Cats that eat only dry food
- Cats with a nervous/skittish personality

\*This is a big risk factor because, even if there are no outward signs of hostility, many cats that live together have a strained relationship where they just about tolerate one another.

### What are the signs of feline lower urinary tract disease?

Cats are secretive about stress and discomfort, so monitor your cat’s toilet habits. Signs to look out for include:

- Increased visits to the litter tray to urinate
- Blood in the urine
- Urinating outside the litterbox
- Difficulty urinating or painful urination
- Excessive straining to urinate – if your cat is straining but failing to pass any urine, especially if he is a male, see your vet as soon as possible. Although uncommon, urinary blockages are medical emergencies. See “Blocked Cats” below.

- Recurrence – cats with the idiopathic form tend to have bouts that appear rapidly and subside within 5-10 days, then recur in future

### **How is feline lower urinary tract disease diagnosed?**

A diagnosis starts with you noticing changes to your cat's urination habits and talking to your vet, who may perform:

- *A physical exam* which often is normal, but may reveal bladder thickening or pain
- *Urine dipstick tests* to check for blood, sugar, pH, and signs of infection
- *Urine culture* to check for bacterial infection, and find out which antibiotics will be effective
- *Blood tests* to check the liver and kidneys in particular
- *Ultrasound scan* to look for evidence of thickening, stones, or tumours
- *X-rays* to check for bladder stones, especially if your cat has a blockage
- *Medication trial*: if your cat's signs and risk factors are highly suspicious for the idiopathic form, and there is no evidence of a blockage on the physical exam, your vet may suggest trying medication before any other investigations

### **How is feline lower urinary tract disease treated?**

#### Diet

If your cat has urinary stones or excessive crystals which increase the risk of stones, your vet may recommend a specific urinary diet designed to dissolve these and prevent them reforming. Increasing water intake can also dilute these crystals and increase excretion of them.

In cats with the idiopathic form, diluting the urine to reduce irritation to the bladder wall is key to reducing flare-ups.

#### *Increasing Water Intake*

Cats can be sensitive or fussy about changes, so make them slowly and one at a time. You can try:

- Changing slowly to a wet tinned/pouch diet
- Adding water to the food
- Providing multiple fresh water sources in different places including next to the food
- Offer running water (e.g. pet fountain, bowl under a dripping tap)
- Flavour one water source e.g. with chicken broth or springwater from a tuna can

#### Stress Management

Improving a cat's environment to minimise stress is critical for the idiopathic form (FIC). You can:

- Ensure there is at least 1 litter tray per cat, plus one more!
- Try different litter tray locations and litter materials to find out what your cat prefers
- Put litter trays in private, quiet places
- Minimise or avoid stressful events that are known to trigger your cat's FIC
- Alleviate boredom by spending time playing, and providing toys/hiding places/resting places
- Use pheromone products such as *Feliway* sprays and plug-ins

Although a difficult decision to make, rehoming a cat with poorly-controlled FIC to a single-cat household could significantly improve their symptoms and welfare, so could be considered if you have multiple cats.

## Medications

- *Antibiotics* may be used to treat bacterial infections
- For cats with idiopathic cystitis (FIC), options include:
  - *Anti-inflammatory pain relief* such as Loxicom/Metacam during a flare
  - *Additional pain relief* in severe/prolonged flares, such as buprenorphine (Vetergesic)
  - *Antidepressants* such as amitriptyline or fluoxetine can be tried in severe cases where episodes are prolonged and close together, and the above management strategies have all failed
- *Spasmolytics* may be prescribed to reduce spasm of the urethra in male cats that have previously experienced a blockage, these include prazosin and diazepam

## Surgery

Some stones are too big to pass or dissolve, or are made of a substance that cannot be dissolved. In this case, your cat may need surgery to remove the stones. This is called a cystotomy.

Bladder tumours are not always suitable for surgical removal, and management of these cases should be discussed thoroughly with your vet, who may offer referral to an oncologist.

### **What is the prognosis/outlook for feline lower urinary tract disease?**

Often, bladder conditions in cats need lifelong management to prevent recurrence of symptoms. For cats with bladder stones, once these have been removed or dissolved, the prognosis can be very good. The prognosis for bladder tumours is unfortunately much more guarded.

Idiopathic cases can be difficult to treat, but with diet and environment changes most cats see a big improvement. Many will improve as they age. Some cases do remain challenging though, especially if the source of your cat's stress is difficult to remove.

### ***"Blocked Cats"***

Complete blockage of urine flow is more common in male cats due their long, narrow urethra when compared to females. If your cat has become blocked and cannot pass urine at all, they may need to have a urinary catheter placed under a general anaesthetic. Tests such as blood tests, ultrasound, urinalysis, and x-ray are likely to be performed at the same time to attempt to find the cause of the blockage (e.g. tumours or stones).

In many cases no physical blockage is found, and it is suspected that muscle spasm in the urethra, or a plug of inflammatory mucus, is responsible for obstructing these cats.

Urinary catheters usually stay in for at least 48 hours in hospital, and your cat may be discharged once it is removed and they have urinated successfully by themselves.

Unfortunately, cats that "block" have approximately a 1 in 3 chance of blocking again. Male cats that block repeatedly may be candidates for surgery to reroute urine out of a different opening, in a procedure called a perineal urethrostomy.

### **Useful resources**

*International Cat Care Feline Idiopathic Cystitis* <https://icatcare.org/advice/feline-idiopathic-cystitis-fic/>  
*International Cat Care Feline Lower Urinary Tract Disease* <https://icatcare.org/advice/feline-lower-urinary-tract-disease-flutd/>