

# Feline urinary tract disease (FLUTD)

Feline lower urinary tract disease (FLUTD) is not a specific disease, but rather an umbrella term used to describe conditions that can affect the urinary bladder and/or urethra (the lower urinary tract) of cats. It is often difficult or impossible to determine the underlying cause without doing further investigations as all tend to present with similar clinical signs.

### **Signs of FLUTD**

Symptoms of FLUTD can be varied so you may see one or more of the following signs:

- Difficult or painful urination (dysuria) straining to pass urine, possibly crying out.
- Increased frequency of urination (pollakiuria) often only small amounts of urine.
- Blood in the urine (haematuria) The blood may be visible by eye or may only be visible upon microscopic examination.
- Urinating outside the litterbox/unusual places (Periuria) pain, irritation and inflammation causes an urgent need to urinate. Often cats may wee in the bath.
- Overgrooming Pain and irritation in the bladder/urethra may trigger some cats to over groom their tummy/back end. This can result in loss of hair.
- Behavioural changes such as aggression, irritation, restlessness.
- Blockage to the urethra (stranguria) cats will strain to urinate but no urine is passed. This is usually a problem for male cats due to their longer and narrower urethra. If you notice that your cat cannot wee, this is an EMERGENCY and you should contact your vet immediately.

### Which cats are the most at risk of FLUTD?

Cats of any age, breed and gender can be affected by FLUTD, but in general, the disease is more common in:

- Middle-aged male cats
- Neutered cats
- Over-weight cats
- Cats which don't exercise much
- Housecats
- Cats that eat a dry diet

#### **Causes of FLUTD**

FLUTD is an umbrella term for bladder/urethral conditions in cats. It is commonly caused by one or several of the following:

- Idiopathic cystitis 60-70% of cats with FLUTD have no identifiable underlying cause. This is known as 'feline idiopathic cystitis'. This means 'inflammation of the bladder without a known cause'. It is commonly associated with stress.
- Urinary crystals/Bladder stones (urolithiasis). 10-15% of FLUTD cases. Commonly 'magnesium ammonium phosphate' (or 'struvite') and 'calcium oxalate'. Crystals/stones can cause inflammation of the bladder and can block the urethra.
- Bacterial infections (bacterial cystitis) relatively uncommon in cats 5-15% of FLUTD cases. Bacterial infections are more frequent in older cats.
- Urethral plugs These usually occur in male cats. Proteins, cells, crystals and debris in the urine can amalgamate to form a plug that blocks the urethra.
- Bladder cancer Thankfully very rare in cats. A greater risk for old cats.

## **Diagnosis of FLUTD**

Many cases of FLUTD can be assessed based on history, clinical signs and a urine sample. However, sometimes diagnosis can be a little more complex and more diagnostic tests are required.



- Urinalysis analysing the urine. Urine is either collected using special non-absorbable cat litter or via placing a fine needle into the bladder through the skin (cystocentesis). The sample is checked for signs of crystals, inflammatory cells and bacteria among other things.
- X-rays Some bladder stones are easily visible on X-rays, but some require 'contrast radiography' whereby a contrast dye is introduced into the bladder via a catheter. This can help show up some bladder stones, tumours or urethral structures (narrowing).
- Ultrasound This can help identify bladder stones and changes to the bladder wall.
- Biopsies These are not commonly needed. Biopsies are generally performed if there is the possibility of a tumour.

## **Prevention and treatment of FLUTD**

Treatment of FLUTD will depend on the underlying cause. Changes to management can help with prevention of all causes of FLUTD.

Preventions include:

- Reducing stress Stress is a massive contributor to FLUTD in cats. Many cats will only show very subtle signs of stress that are easily missed. A lot of owners are totally unaware that their cat is stressed, and it can be due to things as simple as a new cat on the block or a change in room décor or layout. Subtle signs include sleeping more, spending more time inside/outside than usual or misbehaving. Products such as Feliway and PetRemedy are invaluable to reduce stress for your cat.
- Increasing water intake multiple water bowls around the house of varying shapes and sizes. Some cats prefer running water such as a running tap or a cat water fountain.
- Encouraging frequent urination the general rule is one more litter tray in the house than the number of cats and keep them spotlessly clean! If your cat prefers to urinate outside, try to minimise disruption such as dramatic changes to the garden or causes of fear/avoidance. Make sure there is a litter tray in the house even if your cat prefers outside...just in case!
- Wet food This is a controversial one. Dry food is thought to be better for your pet's teeth and has more nutrition per gram, however wet food provides more moisture and water intake so is considered better for the urinary system.
- Weight loss Obesity is a massive contributor to FLUTD susceptibility. Make sure your cat is at its
  optimum weight to reduce the risk of this condition. Arrange a nurse weight clinic to discuss the
  best ways to reduce your cat's weight via changes in diet, exercise, and treats.
   Treatments may include:
- Non-steroidal anti-inflammatories to reduce the inflammation in the irritated bladder and urethral wall and reduce pain.
- Nutraceuticals these promote a healthy bladder wall and encourage repair of the bladder lining.
- A veterinary diet to dissolve crystals
- Antibiotics if bacteria seen. The vet may request that the urine is sent for culture and sensitivity tests to determine the most appropriate antibiotic.
- Surgery to remove bladder stones or correct urethral strictures.
- Chemotherapy or non-steroidal anti-inflammatory drugs for bladder cancers.

#### **Blocked bladder**

Obstructions of the urethra (the tube leading from the bladder to the outside world) are an EMERGENCY. Acute kidney failure can occur so rapid unblocking of the urethra is vital. Remember, if your cat is unable to urinate, you must visit your vet IMMEDIATELY.

Treatment involves blood tests to check kidney function and electrolytes, pain relief, emergency anaesthesia to place a urinary catheter and fluid therapy via a drip. This can be a difficult and delicate procedure and far too painful to perform consciously. The catheter should ideally stay in for a period of



time whilst hospitalised as the urethra is very prone to spasm and re-blocking in the days afterwards.