



LOWER URINARY TRACT DISEASES

Feline Lower Urinary Tract Diseases (FLUTDs) are a series of conditions that cause discomfort of the bladder in cats. There are two main categories, obstructive disease (where the cat is blocked and unable to urinate) and non-obstructive disease. **Obstructive lower urinary tract disease is life threatening and requires immediate veterinary attention.** It is exceptionally rare for female cats to obstruct). Non-obstructive disease (cystitis or inflamed bladder) is painful and every drop of urine that makes it way into the bladder (from the kidneys) creates an urgency to urinate even if there is not enough urine in the bladder for this. Consequently, cats will make multiple trips to the litter-tray and either don't produce urine or only very small drops at a time of often bloody urine.

What causes bladder inflammation?

In many cases (about 75%), no definite cause is found and the underlying reason is one of the great mysteries of veterinary medicine that many researchers worldwide are trying to unravel. Stress appears to play an important role in the disease. It is important to look for a cause in cats with repeat episodes since in 25% of cases, we will be able to find a specific problem and therefore treat it specifically.

How do we treat non-obstructive disease?

Non-obstructive cystitis is often seen as 'one-off' episodes. It's important to treat any underlying problems that are present. We will usually treat the pain with an anti-inflammatory and recommend a tinned diet to help dilute the urine.

How do cats obstruct?

Cats obstruct when there is a combination of inflammation and crystals. The crystals catch within inflammatory protein and block the urethra (tube from the bladder to the outside). This has been compared to fruit set in jelly (that you might see at child's birthday party). The fruit alone (crystals) can pass through the urethra, as can jelly (inflammatory proteins) but set together, they form a matrix that gets blocked. This is mainly a problem for male cats since their urethra is narrower.

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How do we manage obstructed cats?

Obstructed cats need to be admitted to hospital for this life-threatening condition. We give **pain relief** and then take **blood samples** mainly to assess if there has been any effect on the kidneys. The cat is anaesthetised to **relieve the obstruction** and **intravenous fluids** are given. Depending on the severity of the blockage, some cats may require a catheter into the urethra to ensure the urethra remains clear. Once the cat is urinating freely, the cat can go home but will usually continue on medications to help keep the urethra relaxed (and antibiotics if there is infection present). Cats who have obstructed need to **change diet** to help reduce production of crystals. These **diets alter the pH** of the urine depending on which sort of crystal is found but more importantly **are tinned to ensure the urine remains dilute**.

How do we investigate for underlying causes?

Investigations start with a urine sample and if an underlying cause is not found, we need to send the urine to be cultured for bacteria or look further with radiographs (initially without but later with a dye into the bladder) or ultrasound and sometimes even progress to biopsying the bladder wall. As noted above, many cats have unknown causes so often these investigations don't find a definite answer but even this is an important result as we will have ruled out specific causes such as infections or cancers.

Can I do anything at home to prevent recurrences?

Diet plays an important role and tinned food will help keep urine dilute to help prevent recurrences. Reducing stresses also helps such as ensuring the litter tray is kept clean and have toys that to play with your cat and places for your cat to perch. Other ideas to reduce stresses can be found at <http://www.indoorcat.org/>.