Urinary tract obstruction

What is a urinary tract obstruction?

A urinary tract obstruction is defined as an inability to urinate despite having a full bladder. Generally, the affected animal will frequently assume a position to urinate and will strain without being able to empty the bladder. Urinary tract obstruction is often secondary to an obstruction of the urethra (the canal between the bladder and the outside). The obstruction is often caused by a stone (or calculus) or urinary crystals, a severe urinary tract infection, spasms of the urethra or, less frequently, a mass. Urinary tract obstruction is seen more frequently in males because the male urethra is smaller and shaped like a funnel. However, females can occasionally become obstructed as well. This is a common condition seen in male cats but dogs can also suffer from urinary tract obstruction.

Is a urinary tract obstruction an emergency?

YES!!! It is a very painful and life threatening condition. Toxins produced by the body are eliminated through the urine. With a urinary tract obstruction certain toxins can accumulate and result in significant problems. They can have severe effects on certain organs, most notably the heart, which is very sensitive to one of these toxins (potassium). If potassium levels increase too much, the heart will slow down and eventually stop.

Also, if this condition has been present for a while, the bladder can eventually burst, causing urine to pour into the abdomen. This is dangerous to the abdominal organs and requires emergency surgery to repair the bladder. A pet showing signs of a urinary tract obstruction needs to be seen as soon as possible by a veterinarian. She can then determine if he is suffering from a urinary tract obstruction, or from a less severe condition like a urinary tract infection.

How is a urinary tract obstruction diagnosed?

The diagnosis is often made with a physical examination. An enlarged, hard and painful bladder is palpable manually. When in doubt, an x-ray or ultrasound of the abdomen can show an abnormally large bladder, and sometimes a stone that is blocking the urethra.
A urinalysis is essential to help identify the cause of the obstruction. Bloodwork will need to be performed to determine the “toxin” and electrolyte levels, and the treatment will be adjusted depending on those results.

**What is the treatment for a urinary tract obstruction?**

The first goal is to stabilise the patient if its life is threatened by the obstruction. This is accomplished by administering intravenous fluids and medications to normalize blood pressure, rehydrate and restore adequate heart function. At the same time, the obstruction must be relieved and the bladder emptied.

Depending on the case, the patient may be sedated and a catheter inserted into the urethra to push what is causing the obstruction back into the bladder; thus permitting the urine to flow again. During this procedure, the bladder is flushed to decrease the amount of material in suspension and therefore to decrease the chance of another blockage. Following this procedure, the animal is usually hospitalized with a urinary catheter in place and would receive IV fluids to help eliminate the blood’s toxins and to help flush the bladder.

Depending on the cause of the obstruction, a specific treatment may be established. If the obstruction is caused by stones (or calculi) in the bladder, a surgery will need to be performed to remove those stones in order to try and prevent a recurrence. If the obstruction was caused by an accumulation of crystals, a diet change will be instituted to dissolve them. If there is a urinary tract infection, antibiotics will be prescribed when the urinary catheter is removed.

**Is this a serious condition?**

If the obstruction is dealt with swiftly and adequately, the prognosis is excellent. Unfortunately, death can sometimes happen during the course of the treatment if the patient was too severely affected by the toxins, or if the urinary tract lesions are too extensive. The sooner the animal is brought to the veterinarian, the better its chances of recovery and the shorter his hospital stay will be.

It should be noted that recurrences of obstruction can occur. For these patients, the owners have to always be on the look out for another episode, and ideally, they should not leave their pets unattended for extended periods of time (no more than a few days). Regular follow-ups with your regular veterinarian, including urinalysis and x-rays, are recommended to try and detect these problems before an obstruction occurs.

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