

Happy 4th of July!!!



Welcome to the July 2013 newsletter for the Arapaho Road Animal Clinic. We hope everyone had a great holiday. We missed a newsletter for June (where did the time go!), but we are back with a vengeance. This month we are Feline centric as we start our series of Feline Urinary problems, and address a common skin condition in cats.

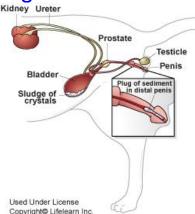
As always, like us on <u>Facebook</u> **f**. Also, Dr. May is always looking for pictures of your pets to put on our facebook page. Send them to <u>aranimalclinic@att.net</u>.

# Feline Urinary Problems-Urethral Plug

Dr. Sperry

Our first installment in what we hope becomes a series on Feline Urinary Issues is dedicated to a true emergency...urethral plugs.

## What is a Urethral Plug?



A urethral plug is a clump of crystals that settle in the urethra, completely blocking the passage. This means the cat is unable to urinate. The kidneys continue to produce new urine (we cannot stop this this from happening). With no way to get out, the urine backs up into the kidneys and causes kidney failure. Left untreated this condition will lead to the death of the cat.

## Which cats are affected?

Feline Urethral Plugs are almost exclusively a problem in male cats. This is because of the anatomy of a male cat. As the urethra enters the penis, it greatly narrows, resembling a funnel. This narrowing allows for grit in the urine that would normally flow through the urethra to pile up and concentrate together, thus forming a plug. Urethral plugs affect both neutered and unneutered male cats. The female cat's urethra does not narrow, so there is no place for the grit to pile up, it just keeps flowing through. That is not to say female cats cannot get blocked, but they are usually blocked by a true stone in the bladder itself (which will be discussed in a future installment).

### What are the signs my cat has a urethral plug?

The most common thing you will see with your cat suffering from a plug is straining in the litter box, going in and out, crying out while straining, but no urine production. Upon palpating their lower abdomen, you will feel an "apple" or "tennis ball". What you are feeling is their bladder full of urine and hard (due to being as stretched out as it can be). If left untreated, other clinical signs you will see are vomiting, lethargy, even seizures or lateral recumbency (laying down and not responding). Cats with urethral plugs will also lick excessively at their penis.

Now, straining at the litterbox can just as easily mean he has a common bladder infection. The difference is in a common bladder infection, the bladder is small-empty-on palpation. Common bladder infections can lead to urethral plugs. The point is if your cat is straining at the litterbox, bring him in QUICKLY so if it is a plug we can treat it, and if not we can prevent one from forming.

### How are urethral plugs treated?

The first step of treatment is to unblock the urethra so the cat can urinate. The cat is sedated, and a urinary catheter is passed. The catheter breaks up the plug and allows urine out. The urinary catheter is left in place for several days, and the cat is placed on IV fluids to flush out the kidneys and bladder. The bladder is also flushed to remove as much grit as possible. After a few days, the urinary catheter is removed. If the cat is able to urinate over the next 24 hours on its own, he can go home. If he plugs again, the process is repeated. Afterwards, steps are taken to prevent a recurrence of the plug (see below).

There are some cases where this option does not work. This is often after a cat has been plugged, then treated, then re-plugged again months later. This second offense is often not caused by grit, but by scarring in the urethra caused by the first trauma. In cases where catheterizing and flushing the bladder will not work, the only other option is surgery. A Perineal Urethrostomy (PU) basically removes the penis and widens the urethra to prevent further obstruction. This surgery is successful without long-term side effects, but the immediate aftercare is extensive, and the surgery is expensive (you must go to the surgery center for it).

### How to I prevent Urethral Plugs?

Urethral plugs are caused by "grit" buildup. The grit is actually small crystals of Magnesium, Urate, Oxalate, and other minerals that buildup in the urine due to an excess in the blood. The Number 1 source of these minerals is DIET. Some foods are high in these minerals, which leads to an excess of the minerals in the blood. The kidneys then filter these minerals out of the blood and send them to the urine to be excreted. Cheaper foods are often the culprit (I am not naming names *here*, if you want advice on brands of food, come talk to us). Feeding a high quality food can help prevent the buildup of the crystals. If your cat has already plugged and been treated successfully, then we highly recommend specific prescription urinary diets to help prevent recurrence. Feeding canned food can also help, as the more water the cat intakes, the more dilute the urine is, thus flushing the bladder more often and not allowing the grit to buildup.



Not all male cats will develop urethral plugs. Diet plays a part, and it is suspected that genetics play a role as well (making some cats more susceptible than others). Some cats just don't drink enough water during the day, so feeding canned food can always help (if they will eat it). The main thing to remember is that if your male cat is straining at the litterbox, the sooner he comes to see us, the better.



Spice says...

It's HOT! Make sure your pets have plenty of water and shade when they are outside, and try to limit outside time when possible. Remember, the smash faced friends (bulldogs, etc) need to be restricted more since they cannot breathe (and therefore cool themselves) as well. Also, some dogs are not as smart as us cats, and will not stop playing even when they are overheating. You must make them stop (you would never catch a cat doing that!)

## Miliary Dermatitis



Miliary Dermatitis (MD) is a very common skin condition in cats, and we are seeing quite a bit of it right now. The classic signs of MD are bumpy lesions and scabs on the cat. These are often concentrated around the cat's neck and back, but can be all over the cat. These are often accompanied by hair loss and extreme pruritis (itchiness). Often, when you touch the affected area, the cat will scratch, twitch, or bite at the area. Owners often think the cat is painful, or having a bad reaction, even a seizure, but the truth is the cat is so itchy it compulsively bites and scratches.

#### What Causes Miliary Dermatitis?

MD is caused by an allergic reaction. The number 1 causative agent of MD by far is...FLEAS!!!! Cats get a couple of fleas on them, and have an allergic reaction. This is called Flea Allergy Dermatitis, of which the most common presentation is a rash called (you guessed it) Miliary Dermatitis.

"But I don't see fleas on my cat." I will refer you to our very first newsletter addressing flea myths <u>here</u>\*, but the gist of it is that with cats, your rarely see the fleas. Cats groom themselves so well that they groom off the fleas before you see them. It only takes one or two flea bites to cause MD in a highly allergic cat. Note that is one or two BITES, not fleas. One flea can bite multiple times, send the cat into an allergic fit, and you will never see the flea. This includes cats on a flea preventative. The flea bites the cat and dies (thanks to the preventative), but the cat still has an allergic reaction to the one bite. Environmental control is key.

#### How is MD treated?

MD is typically treated with a steroid injection to calm the allergic reaction. If there is a secondary skin infection from the scratching and biting, then antibiotics will also be prescribed.

#### Can MD be prevented?

Yes. The most important factor in preventing or treating MD is Flea Control. We need to stop the exposure to what the cat is having an allergic reaction to. Treating the pet and the environment to get rid of the fleas is a must. If you cat goes outside, it can be more difficult as you cannot treat the wildlife (raccoons, rabbits, opossums, stray cats) that come into the area your cat visits, but treating the yard can help.

As I said earlier, we are seeing a lot of Miliary Dermatitis right now, because the fleas are HORRIBLE this year. We highly recommend flea control for every animal (especially the allergic ones). If you see a rash on your cat, run them by so we can take steps to intervene before it gets out of hand.