# URINARY TRACT INFECTIONS IN DOGS AND CATS

Urinary tract infections are very common in dogs and cats. The diagnosis is made by finding white blood cells and/or bacteria in the urine. They require a MINIMUM of ten days of treatment with antibiotics. Unfortunately, many of the bacteria that cause these infections have developed resistance to the antibiotics. It is common for us to have to treat the infection for longer than ten days, or to have to switch to a different medication. It is also common for there to be underlying causes of urinary tract infections such as mineral crystals or bladder stones, polyps, or food allergies. Sometimes these are difficult to detect until the infection is under control.

For these reasons it is VERY IMPORTANT to check a urine specimen again, BEFORE YOU RUN OUT OF ANTIBIOTICS. That way if there is still infection present we will not stop the medication too soon. If the infection has improved but crystals or blood are still present, further testing or treatment may be needed.

Please collect a clean specimen at home	It will keep up to 24
hours if refrigerated. Bring it in for us to check anytime during office hours.	

### FOR CATS:

Empty the litter pan completely and clean it with soap and water, rinse well and dry. Or you can empty the pan and put a clean pan liner inside. Then sprinkle the Nosorb in the pan. It will give your cat something to scratch around in but won't soak up the urine. Once you have a sample, pour it back into the cup, cover and refrigerate. You can pour the Nosorb back in too, or you can rinse it in a strainer and dry it for future use when more samples are needed.

#### FOR DOGS:

Only a few teaspoons of urine are necessary for testing. Take your dog outside on a leash and use the specimen cup to collect the sample. You may find it easier to collect a sample from a female dog in a shallow container, such as a Tupperware lid or shallow dish of aluminum foil.

## PYELONEPHRITIS:

Pyelonephritis means a urinary tract infection that involves the kidneys. Pyelonephritis is especially common in older female cats. Kidney infections take longer to resolve than

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bladder infections, and they can cause permanent kidney damage even if treated properly. Because of this we are even more careful to recheck the urine, at least once while the cat is on antibiotics and again two weeks afterwards. Infection can smolder inside the kidneys with few symptoms until the kidneys fail, so we want to ensure the infection goes away and stays away.

#### **URINE CULTURES:**

The best way to both diagnose and treat a urinary tract infection, and to ensure we get rid of it completely, is to culture the urine. This requires a clean urine specimen, ideally either aspirated directly from the bladder with a syringe and needle or via a urinary catheter. Obtaining a sample this way can be difficult depending on the size and weight of the pet, as well as its temperament. If we can get a clean sample we may want to do both a urinalysis to look for cells and bacteria and a bacterial culture, to identify the bacteria and to tell us what antibiotics will be most effective for treating it.

Traditionally, the urine is sent to a laboratory for culturing and it is 5-7 days before we get our results back. Because we are doing more urine cultures nowadays than we did in the past, manufacturers of lab testing equipment have been introducing some new test kits for urine culturing that make this easier, faster and less expensive. One kit tests for bacterial infection in general and gives us results in 20 minutes. If we get a positive then we know it's worth sending the urine sample to the lab to do a full culture. Another kit lets us grow bacteria much faster than on traditional agar plates and tells us whether the bacteria that grow are sensitive to any of five common antibiotics. We won't be able to tell what specific species of bacteria we have, and the occasional infection won't respond to any of those five antibiotics. Most of the time, however, we will be able to choose an appropriate antibiotic in much less time than we could before.

Once a pet is taking an antibiotic that medication will inhibit the growth of bacteria on a culture. It is best to culture the urine before starting antibiotics and again after the antibiotics have left the pet's system. Thus it is not a good idea to try one antibiotic and then culture the urine if the antibiotic isn't working. Spending the money on a urine culture from the get go is better medicine and may save you money in the long run. We have all been very used to bladder infections being a fairly minor problem that is easy and inexpensive to treat. Over the past decade or two it has become a risky proposition to just throw an antibiotic at it and hope it works. Don't be surprised if we tell you we need to do additional testing than we would have in the past.