



### ABOUT THE DISEASE

A **kidney infection**, or **pyelonephritis**, can affect both canine and feline patients, without showing any symptoms until advanced stage infection. In most circumstances, it is not possible to determine the source of bacteria for **pyelonephritis**, but poor dental health or a severe urinary tract infection are usually the cause. Please see the [Urinary Tract Infection](#) document for additional information.

Keeping up with dental health and routine cleanings or extractions will help reduce the risk for a **kidney infection**. Also, determining underlying urinary diseases such as bladder stones, urinary crystals, or infection of resistant bacteria will help reduce this risk factor. Please see the documents on these diseases for additional information.

Symptoms can often be very vague, and may include:

- Fever of unknown origin
- Pain when stroking/petting the spine
- Painful when picked up
- Decrease in appetite
- Lethargy
- Vomiting

### OBTAINING A DIAGNOSIS

A presumptive diagnosis is often made following a thorough clinical history and physical examination with a veterinarian.

A routine urinalysis will help detect the presence of fine urinary sediment if the urine was obtained using a sterile method, often utilizing the help of an ultrasound. Free-catch samples often contain a large amount of urine debris that will mask the microscopic interpretation of the urinalysis.

A urine culture and sensitivity may be utilized in cases that are poorly responding to antibiotic therapy. With this test, the bacteria are grown at a reference lab and which helps guide antibiotic therapy. However, even with bacteria found in-clinic, there is a 25% chance of bacterial growth at the reference laboratory. While a culture and sensitivity can help guide therapy, it should not be the sole criteria to stop treating a patient with distinctive symptoms.

### TREATMENT

It is very difficult to treat **pyelonephritis** so rechecking the urine helps guide the course of treatment. Many patients require long-term antibiotics and may require upwards of 6-8 weeks of treatment. Pain medications and anti-inflammatories are commonly used in early management, but often not required long-term.

Other management options focus on any underlying diseases that may have contributed to the development of **pyelonephritis**.

### TIPS FOR SUCCESS

- If possible, acquire all urine samples using a sterile technique with ultrasound.
- Many patients will require urine testing every 3-4 weeks for medication adjustments.
- Seek routine dental care and recommended extractions, especially if the patient develops a **pyelonephritis**.