



## PYOMETRA: COMMONLY ASKED QUESTIONS

### What is pyometra?

Pyometra is an infection of the uterus that can occur in intact (not yet spayed) female dogs and cats. It is a bacterial infection that causes an accumulation of a large amount of pus inside the uterus. Pyometra occurs secondary to the hormonal changes of an unspayed female as she progresses through her reproductive cycle.

The cervix is the gateway to the uterus. It remains tightly closed except during estrus (or heat). When it is open, bacteria that are normally found in the vagina can enter the uterus rather easily. If the uterus is normal, the environment is adverse to bacterial survival. If the uterine wall is thickened and cystic, perfect conditions exist for bacterial growth. In addition, when these abnormal conditions exist, the muscles of the uterus cannot contract properly. This means that bacteria that enter the uterus cannot be expelled.

Pyometra is most common in older pets, though it may occur in younger animals as well. After years of estrus cycles without pregnancy, the uterine wall undergoes the changes that promote this disease.

### What are the symptoms of pyometra?

Some pets with pyometra will have a bloody mucus or pus-like discharge that will drain from the uterus through the vagina to the outside. This is called an *open pyometra*. Others have a *closed pyometra* where the cervix does not allow fluid to drain out. This is a much more serious form of the disease because the walls of the uterus can become fragile, stretched and may ultimately rupture, releasing pus and bacteria into the abdomen and bloodstream. Both open and closed pyometras can be life threatening.

Pyometra usually occurs 1 to 2 months after the estrus portion of the cycle. Typically affected pets are lethargic and depressed, have a decreased or complete loss of appetite, and are very thirsty, thus urinating large volumes of urine. Because it is such a common disease and the symptoms can be so vague, pyometra is suspected in any intact female presented when she is "just not feeling well."

Diagnosis of pyometra is based on the history and physical findings. If these results do not yield a definitive diagnosis of pyometra, additional tests such as urinalysis, blood tests and x-rays may be helpful. X-rays of the abdomen may identify an enlarged uterus. In pets that have been recently bred, an ultrasound will distinguish between an early pregnancy and pyometra.

### Can pyometra be treated?

The preferred treatment for a pyometra is to surgically remove the uterus and ovaries, called an ovariectomy (spay surgery). Dogs diagnosed in the early stage of the disease are very good surgical candidates and surgery is recommended as soon as possible. The surgery is more complicated than a routine spay, as the dogs are often diagnosed when they are quite ill. Intravenous fluids are often needed before and after surgery. Antibiotics are required following surgery to ensure the bacterial infection is cleared completely.

If your dog is a valuable breeding bitch, there may be other non-surgical treatment options that can be discussed with your doctor. Keep in mind though, that the rate of recurrence is 50-75% and that the chances of subsequent successful breedings are only 50%. If you opt to deny treatment, or treatment is not performed quickly, the toxic effects from the bacteria may often be fatal.

In summary, pyometra is a potentially life-threatening infection of the uterus that occurs in unspayed female cats and dogs that, at times, can be difficult to distinguish from other problems. ***The best way to treat pyometra is through prevention, by spaying your pet BEFORE it occurs.*** For those animals with pyometra, the prognosis is best when diagnosed and treated early. The longer the disease is allowed to progress without treatment, the greater the chance of serious complications. As always, if you have any further questions, please contact the Drs. or staff at the clinic.