

# PYOMETRA

## About Pyometra

Pyometra is a bacterial infection of the uterus which can be life threatening if it is not treated promptly. Pyo= pus and metra=uterus, hence the name pyometra, describing a pus filled uterus. Pyometra develops 2-10 weeks after the end of the estrus cycle which occurs only 2x/year in dogs but as often as every 2-3 weeks in cats. A pyometra is termed open if the cervix is relaxed and allows pus and discharge to drain out the vulva, and closed if the cervix is tight and the infection is sequestered in the uterus.

Approximately 85% of pyometras are open, 15% are closed. Patients with closed pyometras are usually more debilitated than those with open pyometras. In either case, the optimal treatment for a pyometra is to spay the animal as soon as possible. Pyometras do not generally respond to antibiotic therapy alone since the uterus acts like a huge abscess pocket. Owners must be aware that surgery to remove a large infected uterus is much more difficult due to engorged blood vessels and the possibility of a uterine tear even with gentle handling. The body wall incision will be considerably longer as well. Occasionally, the surgeon finds that the uterus has already ruptured and must take additional steps to treat peritonitis. All patients with pyometra should receive intensive pre & post-operative care for several days after surgery for optimal outcome. Even with proper care, some dogs do die during & after surgery. For this reason (as well as population control), most veterinarians recommend to spay all female dogs who are not going to be used for breeding. With no uterus, there is no chance for infection.

## Symptoms

- Anorexia
- Lethargy
- Drinking more water & urinating more
- Vomiting / diarrhea- common with closed pyometras
- Smelly Vaginal discharge

## Diagnosis

Based on clinical signs and diagnostics. The veterinarian can often palpate a large thick uterus, and if an open pyometra, a smear of the vaginal discharge can be examined under the microscope to look for infection. A CBC will show an elevated white blood cell count. Radiographs of the abdomen will show a large distended tubular structure representing a pus filled uterus. Ultrasound can also be used to image a uterus full of pus.

## Treatment- surgery

The optimal and most successful treatment is surgery to remove the uterus and ovaries- otherwise known as a "spay". Most animals with pyometra need to be stabilized before surgery with IV fluids and antibiotics. As previously mentioned, the surgery is complicated by engorged blood vessels and a large heavy uterus that tears easily with even gentle handling. There is a higher risk for bleeding and contamination of the

abdomen with pus when removing the uterus. Most surgeons will lavage or rinse out the abdomen after the uterus is removed before suturing up the body wall.

**Post-operative care** includes IV fluids, antibiotics, and possibly a blood or plasma transfusion. Blood pressure and heart rhythms should be monitored for at least 24 – 48 hours after surgery and problems addressed promptly.

### **Prognosis- depends on the type and duration of the pyometra**

Open pyometras carry a better prognosis than closed due to 2 factors- since open pyometras drain, there is less of a toxin buildup in the body, and due to the discharge, owners bring their dogs to the veterinarian sooner. Additionally, as with most diseases, aggressive veterinary care greatly favors the outcome.