

Pyometra

What is it?

One of the most common reproductive emergencies seen in a veterinarian emergency room is a condition called pyometra. The name of this disease is Latin for “pus-uterus” and describes a life threatening uterine infection that most typically affects older, intact female dogs.



What causes it?

As intact female dogs (bitches) age, the hormones that fluctuate during each heat cycle change the uterus - it becomes thicker and engorged with tissue to support pregnancy. As these changes occur year after year the uterus can become permanently changed, especially prone to developing infection and quite poor at fighting off infection when it does occur. The uterus is most susceptible to infection 1-2 months after each heat cycle. While the uterus is normally a sterile internal organ, the healthy vagina is full of bacteria. When colonizing external organs, these bacteria cross the cervix, though, and enter the uterus. Infection may take hold. If this happens pyometra develops.

Signs & Symptoms

If an intact female dog come the emergency room for changes in energy level, change in appetite, “seeming sick” of increased thirst and urination, pyometra would be one of the top concerns.

Some bitches will have pus coming from the vagina, a sign of an “open pyometra”. There is infection in the uterus, and the pus is able to exit the uterus via the cervix to the vagina.

Unfortunately, other times the cervix is tightly shut and does not allow the pus to leak out of the uterus, which is considered a “closed pyometra”. Closed pyometras are significantly more challenging to treat. As there is no external discharge to alert the owner, they often don’t know it’s an emergency until they bring a bitch into the vet for other, more obvious symptoms. By that time, the infection has had opportunity to grow more profuse.

Breeding implications/genetics:

Rarely, nonsurgical options will be discussed as management of pyometra. This option reserved mostly for dogs with open pyometra (the dogs which the pus is leaking out of) who have a high breeding value. Certain hormones can be given by injection to help the uterus contract and expel the infection. These contractions, are quite uncomfortable for the dog and increase the risk for uterine rupture.

This treatment requires a week of hospitalization and is often more expensive than surgery. It is essential that the dog is bred during the next heat cycle. Many dog are unable to carry pregnancy due to the scaring of the Uterus. The rate of having another pyometra is quite high, so the decision to pursue medical therapy must be very carefully considered.

Testing & Treatment

How is it diagnosed?

If your dog come into the hospital with the above described signs, often the first steps will to do a physical exam, do the necessary lab work, and get x-rays. Lab work may show dehydration, high white blood cells (indicating an activated immune system) and if your dog is very sick, she may have significant changes in electrolytes, blood sugar, kidney, and liver values.

X-rays can show a distended, fluid and/or gas filled uterus. If the uterus is draining pus, it may appear normal. If the diagnosis is not confirmed by physical examination, lab work, and x-rays, an ultrasound can be done to more directly visualize the uterus and determine its degree of abnormality.

How is it treated?

While surgical removal of the infected uterus is the treatment of choice for this condition, dogs with a “closed pyometra” need surgery sooner and need more aggressive treatment and management.

This information is not meant to be a substitute for veterinary care. Always follow the instructions provided by your veterinarian.

Newfoundland Dog Health Fact Sheet produced by the NCA Health & Longevity Committee written by J. Cornell DVM, copyright Newfoundland Club of America 2018