

## PYOMETRA A SERIOUS INFECTION THAT CAN BE EASILY PREVENTED

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**Q.** We almost lost our dog recently: she came very close to dying as a result of an infection of her uterus. We were saddened to discover that if only we had had her spayed at a younger age, we may have prevented her illness, suffering and near demise. Please tell your readers about pyometra, so they can avoid the anguish we had to go through.

**A.** I would only be too happy to educate pet owners about this disease. I'm sure more than just a few have learned about it already the same way you did. Hopefully others will not have to know.

Pyometra is not just a simple infection but an accumulation of pus in the uterus (hence the name, pyo=pus, metra=uterus). It occurs most frequently in aged dogs, eight to 14 years of age or older.

The infection develops as a result of repeated, cyclical hormonal stimulation of the uterus. Every time the female dog goes into heat, the glands in the uterus become engorged to prepare for potential pregnancy, in response to the hormone progesterone. The glands and their contents provide an ideal growth medium for bacteria.

The source of bacteria is usually an ascending infection, from the outside of the body, up the vagina to the uterus. Occasionally they arrive at the uterus via the bloodstream.

The bacteria multiply within the uterine glands and lumen. The body responds to the infection by bring white blood cells to the uterus. If the bacteria are very virulent, and they usually are, the white blood cells are unable to kill them; the cells die and accumulate as pus.

Pyometra is a very serious infection and can spread throughout the rest of the body. Toxemia develops when poisons produced by the bacteria enter the bloodstream and exert systemic effects.

The dog will often become seriously dehydrated as a result of the illness. She can easily go into shock and die. The kidneys can be severely compromised from the dehydration and toxemia.

Signs of pyometra include loss of appetite, lethargy, vomiting, increased water consumption, and usually, a vaginal discharge.

Diagnosis is based on history, physical exam, X-rays and lab tests.

The most effective treatment of pyometra is surgical treatment; the uterus must be removed to eliminate the infection (an emergency spay in effect). Antibiotics alone are rarely effective, because they cannot penetrate the thick, copious pus to get to the bacteria.

Unfortunately, most dogs that develop pyometra are old and therefore not the best of anesthetic candidates. The fact that they are critically ill only worsens this risk. This is one big reason that it is far better to spay a dog when she is young and healthy than old and sick. (Which option would you prefer for your dog?).

Intravenous fluids are usually necessary to treat shock and prevent kidney failure. Antibiotics are given to control any residual infection.

In the case of a valuable breeding dog, medical therapy is sometimes used in an attempt to salvage the uterus. This route is far less effective than surgery, but some breeders are willing to take the risk. However, despite the most aggressive medical therapy, the bitch may be infertile after recovery.

Pyometra is easily prevented. The family pet should be spayed at 6 months of age, to prevent breast cancer as well as uterine infection. The breeding females should be spayed when she is past breeding age, which is approximately six years of age, depending on the breed of dog. Leaving the uterus in the aging dog and exposing it to repeated hormonal stimulation and bacteria is only asking for trouble.

