Pyometra
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What is pyometra?
Pyometra is a bacterial infection of the uterus that occurs during a specific part of the heat cycle called diestrus (2-10 weeks after coming out of heat). Symptoms can include lethargy, poor appetite, and vomiting. Some dogs will show increased thirst and urination. Most dogs have a cream-colored or blood-tinged vaginal discharge (pus). This is called open-cervix pyometra. However, some dogs will not have vaginal discharge. This is called closed-cervix pyometra, and these dogs tend to be more critically ill than dogs with open-cervix pyometra.

How did my veterinarian diagnose pyometra?
The diagnosis of pyometra is suggested by occurrence of symptoms in bitch with a history of estrus recently, presence of vaginal discharge, and visualization of an enlarged, fluid filled uterus seen on x-ray or ultrasound. Sometimes a veterinarian can feel an enlarged uterus in the abdomen. Your veterinarian may also run blood and/or urine tests to help diagnose pyometra, or to evaluate metabolic status before anesthesia. These tests will usually show that the body is trying to fight a severe infection.

How did my dog get pyometra?
For about 2-3 months after ovulation, the hormonal influences cause the uterus to thicken in preparation for potential pregnancy. There is increased secretion from glands in the uterus, and decreased immune response. This creates an ideal situation for bacterial growth. Bacteria ascend from the vagina and colonize the uterus, creating a severe infection with accumulation of pus.

How is pyometra treated?
Pyometra is a life-threatening condition, so treatment needs to be timely and aggressive. Surgically removing the infected uterus (spaying, or ovariohysterectomy) is the best treatment for pyometra, and the only reasonable treatment for critically ill animals. Your pet will also need a catheter placed into a vein so that fluids can be administered, along with antibiotics. Sometimes, animals may die despite the best treatment, because bacteria and toxins have moved out of the uterus and into the blood, causing septic shock.

In certain cases, such as young, valuable breeding bitches with an open-cervix pyometra that are not critically ill, medical management may be considered. Injections of a hormone called prostaglandin f 2 alpha are given for 3-5 days, along with antibiotics and fluids. There are side effects to the prostaglandin, including panting, drooling, diarrhea and vomiting. If the animal has not responded well to medical management, surgery needs to be considered.

How can I prevent pyometra from occurring?
The only known prevention is surgical spay. Removing the uterus before it becomes infected will completely prevent this condition. If you are not planning to breed your dog, spaying before pyometra occurs is much less costly, and much less risky for your pet. Additionally, pregnancy appears to reduce the chance of pyometra developing, so planning sequential breedings for a brood bitch with an elective spay schedule at the end of her reproductive career is optimal.