

Spay/Neuter and Pyometra

Spay/Neuter

An intact or unaltered pet is one that has not had his or her reproductive organs removed. A spay refers to the removal of a female dog's ovaries and uterus, while a neuter or castration refers to the removal of a male dog's testes. Both procedures are performed surgically; neuters are typically short, simple procedures that may be performed under heavy sedation or general anesthesia, while spays are usually more involved and always performed with general anesthesia. By removing the reproductive organs, male dogs are unable to impregnate female dogs and female dogs cannot become pregnant.

There are several benefits associated with spaying your female dog. Spayed females do not have estrus cycles (with associated behavioral changes and vaginal bleeding), are exceedingly unlikely to develop a pyometra (uterine infection) and are at significantly less risk for developing mammary or other reproductive organ cancers.

In male dogs, neutering decreases the risk of several prostatic diseases and testicular disease and may improve certain behaviors, including aggression and roaming.

Conversely, there may be some benefits to keeping certain breeds of dogs intact or unaltered at least until they reach sexual maturity. The influence of hormones may help to stabilize joints and ligaments, and thus prevent orthopedic diseases in the future. Further, certain breeds that are spayed or neutered early may be at higher risk for non-reproductive cancers in the future. It is very important to discuss the risks and benefits of spaying or neutering your pet with your primary care veterinarian.

Pyometra

Pyometra refers to a uterine infection that occurs secondary to hormonal changes, namely an increase in progesterone. Pyometra can be life-threatening. The majority of pyometras occur in older, intact (unspayed) female dogs, but intact female dogs of any age can have a pyometra. Rarely, a "stump pyometra" can occur in the uterine remnant of spayed dog; it's important to note that dogs must also have an ovarian remnant that's producing progesterone to develop a "stump pyometra."

Dogs normally have an estrus cycle or "heat cycle" every 6 months. Estrogen is the predominant hormone during estrus and it's during this 1 to 2 week period that dogs can become pregnant. Following estrus, the level of estrogen decreases and the level of progesterone increases. Progesterone is meant to promote conditions ideal for maintaining a pregnancy: it causes the uterine lining to thicken, stops the uterus from contracting, and inhibits local immune system activity. In the absence of pregnancy, these conditions can also permit the development of a serious bacterial infection. Pyometra, therefore, typically occurs several weeks after a heat cycle.

Pyometras can be "open" or "closed," depending on whether the cervix is tightly closed or partially open. Clinical signs associated with an "open pyometra" may include purulent vaginal discharge, lethargy, decreased appetite, fever, and increased thirst and urination. In addition to the aforementioned signs, pets with a "closed pyometra" can become much sicker much more quickly because pus is unable to drain out of the uterus. These patients may present septic, referring to a life-threatening systemic or blood-borne infection.

Pets diagnosed with pyometra may respond to medical management through a combination of antibiotic and hormone therapy. In cases of critical illness, pets are often stabilized and then taken to surgery for an emergency spay.

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Moderate to Severe: We advise emergent transfer to an emergency or emergency and specialty center for continued diagnostics, supportive care, and monitoring.

Mild to moderate: Please follow-up with your primary care veterinarian as soon as you're able to do so for further evaluation.