



Spaying/Neutering Your Dog

Why do we spay & neuter? Have you ever wondered why your family veterinarian encourages you to have your dog surgically altered? There are many reasons for this recommendation. Spaying & neutering eliminates behavioral changes associated with hormonal cycles, controls canine populations and prevents several deadly conditions associated with sexual hormones, such as an infection of the uterus (pyometra) and breast cancer (mammary tumors) for females and testicular cancer and prostate cancer for males.

At Dunwoody Animal Medical Center, we offer both a traditional spay and a laparoscopic spay.

Traditional Spay: The traditional, or open, spay uses one medium to large incision in the abdomen to expose the reproductive organs. In order to gain surgical access to the uterus and ovaries, the surgeon has to stretch and tear down certain ligaments as well as the uterus itself, which results in the possibility of more bleeding. The uterus and/or ovaries are removed through the opening, and the incision is closed in multiple layers. Recovery with post-operative restrictions takes approximately 7-10 days.

Laparoscopic Spay (for dogs weighing at least 15 lbs): Also known as a minimally-invasive spay, the laparoscopic spay involves one or two very small incisions. A slender video scope is inserted into the abdomen through one of the incisions, and the surgical instruments are inserted through the other. Laparoscopic procedures often take a bit longer than a traditional spay, primarily because it demands more precision and less aggressive manipulation of tissues and organs. The smaller incisions and advanced blood vessel sealing instrumentation result in less bleeding and trauma, dramatic reduction in post-operative pain, and a quicker return to full function. A laparoscopic spay also leads to a faster recovery time and less post-operative restrictions, making laparoscopic spays an attractive alternative for active dogs. Recovery with post-operative restrictions takes about 1 day.

While dogs have done well with traditional spays for years, we are excited about the opportunity to offer a minimally invasive alternative. We would be happy to answer any questions you may have about these options!

[When to Spay/Neuter?](#)

Traditionally, veterinary medicine has recommended that all dogs be spayed/neutered prior to reaching sexual maturity. For example, studies show spaying prior to the first heat virtually eliminates the possibility of mammary cancer. Dogs spayed between their first and second heat cycle have a 7-12 % chance of developing mammary cancer and dogs spayed after their second cycle have the same incidence of that mammary cancer as unspayed dogs, which is approximately 25%. Of the dogs that develop mammary cancer, 50% of those cancers will be malignant. Only 50% of dogs with mammary cancer are cured with surgery.

However, a recent study out of California looked at the age of spaying/neutering with respect to 3 major orthopedic disorders (hip dysplasia, ACL tears, and elbow dysplasia,) and 3 cancers (lymphosarcoma, mast cell tumor, and hemangiosarcoma). The study looked at Golden Retrievers and Labrador Retrievers. The dogs were classified by age of spay/neuter, both male and female, according to one of the following groups: spayed before 6 months, 6-11 months, 1-2 years of age, 2-8 years of age and never neutered or spayed.

While no blanket statement can be made to encompass a single best time to spay or neuter, Dunwoody Animal Medical Center's believes that _

- 1) Spaying/neutering between the ages of 1-2 years gives the best overall results regarding prevention of orthopedic disease.
- 2) Spaying/neutering prior to 6 months increases (in some case significantly) the risks of disease with regard to most all of the cancer categories.
- 3) Female Golden Retrievers had an 11% incidence of lymphoma in the 6-11 month group, 6% at 1-2 years, and 1% at 2-8 years. However, the 2-8 year group will also have a 25% incidence of mammary cancer.
- 4) Labrador Retrievers had no major differences between any of the groups with regard to cancer.

Taking all of these facts into consideration, we recommend that you discuss YOUR particular situation with your veterinarian when deciding when to spay/neuter. This study was breed specific, and the risk factors for other breeds and sizes of dogs should be considered. For example, Dachshunds are one of the more common breeds to develop

mammary cancer while rarely being affected by hip dysplasia or some other cancers, so spaying prior to the first heat may seem like the best choice in that breed.

Which Spay Is Right For You?

There is more than one way to spay your pet. Traditionally in the United States, veterinarians perform an **OVH (ovariohysterectomy)** which removes both the ovaries and the uterus. European veterinarians almost always elect to perform an **OVE (ovariectomy)** which removes only the ovaries and leaves the uterus intact. Recently many United States veterinarians are shifting towards the European way of thinking when it comes to spays.

Is one procedure safer than the other?

Both procedures are relatively safe and have few complications. Because it is less invasive, the OVE is associated with shorter incision lengths, shorter anesthetic and surgical times and lower postoperative pain. Either procedure can be done laparoscopically or traditionally

But doesn't it make sense that removing the uterus eliminates the risk of certain diseases?

Common sense dictates that diseases of the uterus are prevented by removing it (no uterus = no uterine disease.) However, uterine diseases do not occur without the hormonal exposure caused by the ovaries. Uterine tumors can develop after an ovariectomy but uterine tumors are reportedly rare (0.03%) and are benign in 85% to 90% of cases. Therefore, the overall risk for developing a malignant uterine tumor after OVE has been estimated to be 0.003%.

What are the limitations of an ovariectomy?

One important limitation of the ovariectomy is that it should only be performed in young, healthy females with a healthy uterus. Older females should have an ovariohysterectomy performed because, over time, exposure to hormones can potentially cause unwanted endometrial changes.

So which way should I spay my pet?

Only you and your veterinarian can decide which procedure to choose for your pet. There is no official statement by the AVMA as to which procedure is preferred. Either surgery will always have far greater benefits than not spaying your pet.

Bloat and Gastropexy

Gastric Dilation-Volvulus (GDV) is a very serious health risk for many large breed or deep-chested dogs and is commonly referred to as “bloat.” For reasons that are still not known, the stomach will quickly begin to fill with gas and begin to rotate in the abdomen. If not detected and treated quickly, GDV is routinely fatal. This can happen over a period of hours. A gastropexy is a surgical procedure that permanently attaches the stomach to the inside of the abdominal wall in order to prevent shifting and twisting. A gastropexy effectively prevents dilation and rotation in up to 95% of dogs. Gastric Dilation – Volvulus is a very serious condition with a high mortality rate. A gastropexy is often an easy way to virtually prevent GDV in a young, healthy dog of a high-risk breed. The procedure can be performed on its own but is usually done concurrently with a spay or neuter.

Breeds at highest risk for GDV include:

- Retrievers (Labs, Golden Retrievers, etc.)
- Great Danes
- German Shepherds
- Weimaraners
- Doberman Pinschers
- Bassett Hounds
- Standard Poodles
- Boxers
- Setters (Gordon, English, Irish, etc.)
- Mixes (Labradoodles, Goldendoodles, etc.)

If you are interested in talking more about the Gastropexy procedure or scheduling it at the time of your dog’s spay or neuter, please do not hesitate to ask us more about it. Because of the **VAST** difference in incision size and recovery time, we only perform gastropexies laparoscopically.

Microchips

If you have not already done so, now is the perfect time to consider microchipping. Despite your best efforts, accidents can happen - someone leaves a door ajar, the landscaping crew leaves the gate open, etc. If he or she is wearing a collar and ID tag, chances are good that you'll get her back. But what if the collar comes off? Microchips are a permanent form of identification (about the size of a grain of rice) that are placed just under the skin between the shoulder blades. While placing a microchip doesn't require anesthesia, many clients opt to perform this procedure concurrently with a spay or neuter.