

Neutering

- Neutering is a surgical procedure in which the testicles are removed in a male animal.
- Neutering prevents unwanted reproduction and can help eliminate negative behavioral effects of male hormones, such as roaming and aggression.
- Neutering may also be performed to treat testicular and anal tumors and some prostate problems.

What Is Neutering?

Neutering, also known as *castration*, is a surgical procedure that involves removal of the testicles. It is a common surgical procedure performed on male dogs and cats to eliminate the ability to impregnate females. Neutering is also used to treat certain medical conditions, such as testicular cancer, anal tumors, and some forms of prostate disease.

How Is Neutering Performed?

The Presurgical Evaluation

Your veterinarian may recommend a presurgical evaluation before neutering your pet. The presurgical evaluation may include a physical examination to ensure that your pet is healthy enough for surgery. Preanesthetic blood work may also be recommended. This testing is designed to help identify problems that may increase the risks associated with surgery or anesthesia. Your veterinarian may want to use preanesthetic blood work to check for several medical conditions, including infection, anemia (a low number of red blood cells), low blood sugar, inadequate blood-clotting ability, liver disease, and kidney disease.

If your pet has any preexisting medical issues, such as a heart problem, your veterinarian may recommend additional testing to determine if any precautions are recommended or if surgery should be postponed or cancelled due to health reasons.

Sometimes, the presurgical evaluation can be performed on the day of surgery. However, some veterinarians perform this testing a few days or weeks before the procedure is scheduled.

Surgery Day

To reduce the risk of vomiting during the procedure, it is generally recommended that pets have an empty stomach before undergoing anesthesia. Your veterinarian will likely ask you to remove your pet's food and water bowls the night before surgery and to withhold food and water on the day of surgery. If your pet eats or drinks before undergoing anesthesia, tell your veterinarian, as postponing surgery may be recommended. If your pet receives insulin or any other medications, ask your veterinarian what you should do on the day of surgery. You may be advised to adjust the medication dosage or to withhold medication for that day.

Before the surgery begins, your pet will be given anesthesia. This keeps your pet still, asleep, and completely pain free during the operation. There

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are many types of anesthesia; your veterinarian will choose the one that is best for your pet. Some types are given as an injection, while other anesthetics are gasses that are inhaled. During anesthesia, a small plastic tube is inserted into the patient's airway to support breathing. The tube is connected to the anesthetic gas machine to give the patient a constant flow of anesthetic gas and oxygen. During this time, your veterinary team may also connect monitoring equipment to constantly measure heart rate, breathing, and oxygen use during anesthesia.

Once your pet is asleep, the surgical site is shaved and scrubbed using a germicidal solution. The area is then draped with sterile cloths that help keep the

surgical area sterile. The veterinarian and veterinary assistants then prepare for surgery through repeated handwashing with germicidal soaps and then put on sterile gowns, caps, masks, and gloves. Keeping everything sterile helps prevent infections.

The neuter surgery in a cat is performed through an incision that is made directly into the skin over the scrotum. The testicles are located and separated from surrounding structures. As the testicles are surgically removed, blood vessels are closed and double-checked for bleeding before being replaced into the incision. The scrotum is not sutured and is left open to heal.

For neuter surgery in a dog, the incision is made a few centimeters in front of the scrotum. The testicles are located, pushed up through the incision, and separated from surrounding structures. As with feline neutering, blood vessels are closed and double-checked for bleeding before being replaced into the incision. In canine neutering, the surgical incision is sutured closed.

In some dogs and cats, the testicles do not both descend into the scrotum as they should during normal development. When one testicle (or in rare cases, both testicles) fails to descend, the condition is called *cryptorchidism* (crypt – orchid – ism). Cryptorchidism is a medical concern because the undescended testicle can remain in the abdomen, where it can become cancerous or cause other medical problems. Neutering is slightly different when the patient has an undescended testicle. The normal testicle is removed as noted above, but the veterinarian generally needs to make a separate incision (sometimes into the abdomen) to remove the undescended testicle.

Whatever procedure your veterinarian uses, every effort will be made to keep your pet as safe as possible during and after the procedure. Once the surgery is completed, the surgical area is cleaned again, and the patient is permitted to awaken from anesthesia. Afterward, he will be monitored in a recovery area until he is awake and stable enough to go home. Additional pain medication is generally given at this time. Some hospitals keep surgical patients overnight, so they can be closely observed and monitored by hospital staff; however, other hospitals allow pets to recover at home.

At-Home Care After Surgery

Even the best and most successful surgery can result in complications if postoperative care is inadequate. Your veterinary team will review your home-care instructions before you take your pet home. Be sure to follow all instructions carefully and contact your veterinarian if you have questions or concerns after you get home. Here are just a few tips:

- **Food and water:** You may be tempted to give your pet a large meal after he returns home from being neutered. Don't! Smaller meals are generally recommended for the first day or so. Ask your veterinarian when normal meals can be resumed.
- **Stitches:** Your pet may have stitches on the outside of the skin after surgery, but some veterinarians choose to bury the stitches underneath the skin or to use surgical adhesive to close the incision. Some suture material is dissolvable and does not need to be removed, whereas other stitches need to be removed after surgery (usually in 7 to 14 days). Your veterinarian will review these details and other at-home care details before you take your pet home from surgery. Even if stitches are not present, check the incision regularly for swelling, bleeding, bruising, or discharge and report any problems to your veterinarian.
- **Protecting the incision:** Your pet should not be permitted to lick or bite the surgical area. This can open the incision or cause a serious infection. Your veterinarian may recommend that your pet wear an Elizabethan collar to prevent tampering with the incision and stitches. This is a plastic cone that fits over your pet's head (like an upside-down lamp shade) to prevent licking or biting of the surgical area.
- **Medication:** Be sure to give all medications as directed. If your pet vomits after receiving medication or has other complications, call your veterinarian.
- **Activity restriction:** Running, jumping, or using stairs should be avoided (if possible) for approximately 7 to 10 days after undergoing neuter surgery. Excessive activity can cause pain,

Tests and Procedures

bleeding, swelling of the incision, and other complications. Even if your pet seems perfectly fine and wants to be active, continue activity restriction as recommended by your veterinarian.

What Are the Benefits of Neutering?

There are many benefits to neutering your pet. Most importantly, neutering helps reduce pet overpopulation. Neutering also prevents testicular cancer, is helpful in treating certain anal tumors, and reduces the risk

of certain prostate issues. Neutering can decrease negative male behaviors associated with testosterone, such as roaming and aggression. For male cats, neutering reduces the potency of unpleasant “tomcat” urine odors and reduces the likelihood of urine marking and other negative behaviors.

For most pets, the benefits of neutering far outweigh the potential risks. The decision to neuter or not is an important one, so be sure to discuss this health issue with your veterinarian.