Spay/Neuter, Why Veterinarians Recommend It

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As a new pet owner, you take Owen to a local veterinarian for his first puppy exam. During the visit, the veterinarian questions whether you are deciding to have Owen neutered. In return, you ask what is neuter and why should Owen need it? The veterinarian briefly explains what it means and rambles off a couple of reasons why he recommends neutering. You then are left with the hunger for more knowledge on the subject. Sounds familiar? This article will give you some insight on why veterinarians recommend to spay and neuter your pets.

Spay and neuter are terms used to describe the surgical act of removing the reproductive organs from females and males, respectively. Both procedures are routinely performed by veterinarians under general anesthesia typically around six months of age. This age is thought to be the most convenient time as it allows for the pet to finish its’ initial vaccinations and the animal has not yet reached sexual maturity. Wolfe states that it has been a common act to recommend spaying prior to the first estrus (heat) as this reduces the risk for mammary cancer. Neutering in the male pet is also recommended prior to sexual maturity because this may help curtail undesirable behavior and prevent certain diseases.

The most recommended reason to have a female pet spayed is to reduce the risk of developing mammary neoplasia which is the most common form of cancer in sexually intact females per Smith. This link between sex hormone and tumor has been the most well studied of all the benefits regarding spaying. The incidence of mammary neoplasia increases with age, most commonly occurring between 7 to 13/14 years for dogs and cats, due to continuous exposure to female sex hormones. This risk of mammary gland neoplasia can almost be eliminated by spaying. Schneider found dogs that were spayed prior to their first estrus had a risk of 0.5%, those spayed between the first and second estrus had a risk of 8%, and those spayed after their second estrus had a risk of 26%. Similar results have been demonstrated in cats.

Pyometra, an infection of the uterus, is common in aged dogs and cats with an incidence of occurrence ranging from 23-25% by 10 years. Root states that ovariohysterectomy (spay) is curative, but there is a mortality rate of 0-17% that comes along with surgical management. Removal of the uterus by spaying at 6 months can eliminate this risk.

As mentioned previously, neutering the male pet can decrease undesirable behaviors. This occurs by changes in neurosteroid synthesis in the brain by removal of sex hormones which are produced by the gonads. Without the gonads, sex hormones cannot be produced and cannot act on the brain to stimulate such behaviors. These behaviors include roaming, mounting, urine marking in the dog and urine spraying, sexual aggression in the cat. Neutering will not remove all undesirable behavior as there are other influences such as environmental and it will not affect inappropriate behaviors that are not sex hormone driven such as fear-based aggression.

Benign prostatic hypertrophy, when the prostate enlarges, commonly occurs with increasing age. Fifty percent of dogs will develop this by 2-3 years and 75-80% by 6 years of
age, as recorded by Root. Neutering can prevent benign prostatic hypertrophy as it decreases prostatic growth and a smaller prostate is less likely to become infected.¹

Considering the effects spay/neuter can have over the lifespan of a pet, it has been studied by Smith that the most common cause of death in dogs is cancer. In one study, sexually intact dogs died of cancer more frequently 44.9% compared to 34.7% neutered males and 50.2% compared to 39.6% spayed females.³ With all causes of death taken into consideration, spayed females had the longest lifespan with a median age of 12 years.³

Currently there is not an abundant amount of veterinary literature available showing evidence on the claims stated above. There are other benefits of spaying and neutering, but have not been researched as well. The choice to spay or neuter is solely that of the owners, but there is some indication that these procedures reduce the risk of acquiring certain preventable reproductive diseases. Overall, this choice, whether yay or nay, will affect the pet’s life.
References


