

## Recommendations on Spaying and Neutering

There has been a controversy regarding the best time to spay and neuter your dog. Many breeders are now strongly suggesting that both male and female dogs are not spayed or neutered until 2 years of age regardless of whether that dog is going to be a pet, a working dog or a breeding dog. Most of this change of opinion is based upon one retrospective study that compares frequency of orthopedic and cancerous processes in golden retrievers that were spayed /neutered before 6-7 months of age from this country compared with golden retrievers in Europe that were left intact. The study implies that there were more orthopedic and cancerous issues in the early spay neuter group. There are some technical problems with the study. 1) This was only a population of golden retrievers and per the author is not meant to be extrapolated to other breeds 2) the study is not controlled for the genetics of the 2 groups 3) The United States dogs were seen originally not for the purpose of the study but because they were being referred for their cancers and orthopedic problems. There is also a smaller study with 8 Rottweilers (a breed also predisposed to cancers) that implied longer life expectancy and less cancer if not spayed until after 4 years of age due to the protective effect of estrogen.

On the other hand, a larger study of a mixed population of dogs demonstrated an overall 15% higher life expectancy for males neutered early and a 25% increased life expectancy in females that were spayed at an early age.

So here is what we know for sure:

All breeds of female dogs have a far greater risk of mammary tumors if spayed after the 1st heat. Mammary tumors in dogs are 50% malignant. The risk of uterine infection in un-spayed female dogs is very high and is a life threatening emergency surgery.

Un-neutered male dogs will develop undesirable behavioral traits with the rise in testosterone such as dog aggression, roaming and marking. In certain breeds of dogs this can be dramatic. Prostate disease is common in un-neutered male dogs over 7 years of age. Neutering to decrease hormonal influence on the prostate often needs to be done in the face of infection instead of when the dog is well.

Surgery on an older female dog has risks associated that do not happen with an early spay. It is paramount that a female dog is not spayed during a heat cycle as the rise in hormones makes the reproductive tissues easily breakable, increases bleeding and decreases healing. This is not a good surgical scenario. It can be tricky to discern the ideal time between cycles. Expense and risk are greater.

Breeders are much more accustomed to having intact animals in their homes (or more commonly in a kennel not associated with the house) and do not see having a dog in heat as the mess that you will.

In large breed dogs there may be some conformational differences if neutered young. They actually grow for a longer time than an intact dog. This is more apparent in the giant breeds. Excess weight causes greater orthopedic debilitation than early spay neuter.

The most likely dog to be involved in a hit by car event is an un-neutered male dog looking for action.

So what do we recommend? For the majority of our clients and their pets, earlier spay neuter makes the most sense. It is important that they maintain good exercise levels and appropriate weight in order not to strain the joints. If your breeder is recommending a delayed spaying of a female dog, know that due to her increased risk of bleeding we may need to refer you to a surgical facility with overnight care when the time comes to spay her. The risk of delaying surgery for a male dog is primarily those of behavior changes that may not be reversible. If you own a gentle disposition breed and choose to delay neutering it is crucial that accidental matings never occur, that roaming tendencies are curtailed and that the procedure be performed before the onset of prostatic disease (approx. 7 years). Please direct any additional questions to our medical staff. We will be happy to help you decide what is best for you and your pet. — Dr. Patricia Hart