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## **Is An Ovary Sparing Spay Right for My Dog?**

The decision on whether to spay your dog is a complicated one and all options should be discussed with your veterinarian. There are many factors to consider including age, breed, health status, intended use, household environment and lifestyle, and temperament. While there are health benefits to spaying, the health benefits must be weighed against the health benefits of leaving your dog intact, retaining their sex hormones. The advantages and disadvantages of each option relate to all dogs, regardless of their lifestyle. There is no “right” or “wrong” decision to make as each dog is an individual, and each family situation is different. The decision comes down to what is best for you and your dog.

If you have decided that you are not going use your dog for breeding purposes, you now have a decision to make and different options to explore. At what age should you consider having your dog spayed? What is the difference between a traditional spay and an ovary sparing spay? What are the advantages and disadvantages of each procedure?

### **When Should you Spay your Dog?**

If you opt for a traditional spay, the age at which the procedure is performed is important. Removing the ovaries interrupt the hormonal axis of the sex hormones with the pituitary gland and other organs and may make the risks of some diseases higher in certain breeds or individuals, particularly when performed at an early age. We recommend waiting until at least 12 months of age or older, usually past their first heat cycle, due to health and behavioral advantages.

If you opt for a non-traditional approach, the ovary sparing spay, where you leave the ovaries but interrupt the reproductive tract to prevent fertility, you may consider doing this at any age. Because the ovaries are left to function, your dog will still have his or her hormones.

### **What is the difference between a traditional spay and an ovary sparing spay?**

#### **Ovary Sparing Spay (OSS)**

- Removes the uterus, cervix and possibly 1 ovary
- Leaves at least 1, if not both ovaries in-tact
- Hormones are maintained
- Will continue to have a heat cycle and may have a very small amount of bloody discharge, will be attractive to male dogs
- Not fertile – Unable to become pregnant
- Not at risk for Pyometra, which is an infection of the uterus

#### **Ovariohysterectomy (Traditional Spay)**

- Removes ovaries and some of the uterus
- Leaves part of the uterus and the cervix
- Hormones are NOT maintained

- Will not have a heat cycle
- Not fertile – Unable to become pregnant
- Not at risk for Pyometra

## **What Are the Advantages of Retaining the Ovaries?**

### **Health Advantages**

- Sex hormone production and function is maintained
  - Sex hormones, in conjunction with other growth-related hormones, promote the closure of the growth plates at puberty, so the bones of dogs neutered before puberty continue to grow
  - Sex hormones are critical for achieving peak bone density
- Lower incidence of hemangiosarcoma (cancer usually found in the spleen or heart), osteosarcoma (bone cancer), transitional cell carcinoma (bladder cancer)
- Lower incidence of obesity, which may be due at least partly to increased metabolic rate
- Lower incidence of urinary incontinence and urinary tract infections
- Lower incidence of autoimmune thyroiditis and hypothyroidism
- Reduced incidence of cranial cruciate rupture
- Reduced incidence of hip dysplasia in female dogs that are not spayed before 5 months of age

### **Behavioral Advantages**

- Less aggression towards people and animals
- Decreased incidence of cognitive dysfunction
- Less fearfulness, noise phobias, and undesirable sexual behaviors

## **What Are the Disadvantages of Retaining the Ovaries?**

### **Health Disadvantages**

- Risk of mammary (breast) tumors and cancer - this increased risk of mammary cancer occurs with each subsequent heat cycle and the benefit of spaying does not disappear until the animal reaches old age. Mammary cancer is one of the most common types of cancer in small animals, but few dogs die from breast cancer due to low metastatic rates and early detection and treatment.
- Increased risk of ovarian cancer - the incidence and mortality risk for ovarian cancer is very low
- An increased risk of pyometra if left intact- risk increases with age. Varies by breed – review this with your veterinarian
- Risk of unwanted pregnancies if a spay is not performed

### **Behavioral Disadvantages**

- Ongoing sexual behaviors, including heat cycles in females who have had an ovary sparing spay

For more information, please visit the [Parsemus Foundation](#) website for further insight on hormone-sparing sterilization.