Ovary-Sparing Hysterectomy

Ovary-sparing hysterectomy (OSH) is a method of sterilization in dogs that provides guaranteed inability to become pregnant, while maintaining reproductive hormones (estrogen and progesterone). Essentially the entire uterus is removed, while maintaining one or both ovaries. This should be compared to a traditional spay, where both the ovaries and uterus (entire reproductive tract) are removed.

There is quite a bit of debate among US veterinarians regarding when or when not to perform this procedure.
OSH makes sense for certain owners and dogs, while for others it may not. Like any surgical procedure, owners should make their decision based on a good understanding of the advantages and disadvantages of each sterilization method.

Advantages of sterilization by OSH:

1. Spay incontinence: OSH will provide a greatly decreased risk of urethral sphincter mechanism incontinence (spay incontinence). About 5% of dogs have problems with dribbling urine after a traditional spay procedure, and this is likely related directly or indirectly to loss of reproductive hormones. The problem is more common in larger dogs, especially Rottweilers, Boxers, Old English Sheep Dogs, Doberman pinchers and Giant Schnauzers. After OSH a female dog has normal reproductive hormones, so the risk will be considerably less.

2. Orthopedic disease: Several common orthopedic conditions, specifically canine hip dysplasia and torn cranial cruciate ligament appear to be more common in dogs after routine spay, especially if the surgery is performed at an early age in large breed dogs.

3. Obesity: For a variety of reasons, traditional spay with loss of reproductive hormones predisposes animals to gain weight. OSH does not have this complication.

4. Neoplasia: Several studies suggest that sterilization by traditional spay may increase the risk of several common, and potentially highly malignant cancers. Included in this list are hemangiosarcoma of the spleen and heart, osteosarcoma (bone cancer), lymphosarcoma, urinary tract cancers, oral tumors and mast cell tumors of the skin.

Disadvantages of sterilization by OSH

1. Mammary gland tumors: Mammary gland tumors are one of the most common tumors in female dogs and about 50% are malignant. Studies indicate that spaying by traditional method with removal of the ovaries and loss of reproductive hormones greatly decreases their occurrence. OSH does not eliminate reproductive hormones, so the risk of developing a mammary tumor will be the same as for an intact female dog. This risk is somewhat poorly documented but is generally estimated to be between 1/1000 and 35/1000 per year.

2. Heats: Dogs with OSH will still come into behavioral “heat” and will attract male dogs for about 1 week 2 times per year. Vaginal bleeding generally does not occur during these heats.

3. Ovarian cancer: Ovarian cancer is not a risk after traditional spay because the ovaries have been removed. The risk of ovarian cancer after ovary-sparing hysterectomy is unknown but is likely small.