# **Canine Spay FAQ**

Sterilization of female dogs is commonly performed with a surgery called a spay, in which both ovaries and the uterus are removed. It is a major surgery. Owners have usual questions regarding this procedure.

#### Why All Female Dogs Should Be Spayed

## **Mammary Cancer**

A female dog spayed before her first heat will have a near zero chance of developing mammary cancer. After the first heat, this incidence climbs to 7% and after the second heat the risk is 50% (one in two!). It is easy to see that an early spay can completely prevent what is frequently a very difficult and potentially fatal form of cancer.

But is it too late if a dog is already past her second heat? No, in fact spaying is important even in female dogs who already have obvious tumors. This is because many mammary tumors are stimulated by estrogens; removing the ovaries, the source of estrogens, will help retard tumor spread.

Traditional Spaying removes both the uterus and both ovaries and is crucial in the prevention as well as the treatment of mammary cancer.

#### Simple Convenience

The female dog comes into heat every 6 months or so. There is a bloody vaginal discharge and attraction of local male dogs. Often there is an offensive odor. All of this disappears with spaying.

# What Is Pyometra?

Pyometra is the life-threatening infection of the uterus, which generally occurs in middle-aged to older female dogs in the six weeks following heat. The hormone progesterone, which primes the uterus for potential pregnancy, does so by causing proliferation of the blood-filled uterine lining and suppression of uterine immune function. It is thus easy during heat for bacteria in the vagina to ascend to the uterus to cause infection. The uterus with pyometra swells dramatically and is filled with pus, bacteria, dying tissue, and toxins. Without treatment, the pet is expected to die. Despite her serious medical state, she must be spayed quickly if her life is to be saved.

This is an extremely common disease of older unspayed female dogs! Pyometra is not something that might happen; consider that it probably will happen.

The older unspayed female dog has an irregular heat cycle. There is no end of cycling comparable to human menopause. If you still decide against spaying, be very familiar with the signs of pyometra. (These include loss of appetite, lethargy, vomiting, excessive thirst, marked vaginal discharge.)

# Now That We know why it Is a Good Idea To Spay, What Exactly Happens?

It is very important that the patient has not been fed in at least 10 hours. Anesthetic medications commonly induce nausea and vomiting can be very dangerous in a sedated patient (vomit can be inhaled/aspirated leading to pneumonia).

A preoperative evaluation is performed; blood work, EKG may be recommended. Placement

of an intravenous catheter to facilitate the administration of anesthetic drugs, for any fluid administration, and for use in case of emergency. This necessitates shaving a small patch of skin on one of the legs. Should you notice such a shaved patch, this is undoubtedly from an intravenous catheter.

A tranquilizer or other pre-anesthetic medication may be administered to ease the induction of anesthesia. A special medication is given intravenously to induce sleep. This medication is called an induction agent and lasts only long enough to establish the maintenance of anesthesia by the inhalant anesthetic (gas). Once the pet is asleep, a tube is placed in the throat to ensure that a clear airway is maintained through out the procedure.

Sometimes a cough is noted for a couple of days after surgery. This may have been caused by the tube in the throat. Such coughs only last a couple of days; anything that persists longer should be re-evaluated.

The tube is hooked up to a machine that delivers a specific concentration of inhalant gas mixed in 100% oxygen. A technician is assigned to monitoring of the pet. The patient is monitored throughout anesthesia by checking gum color, heart rate, respiration rate, and other parameters. And also monitored by machines like pulse oxymetry, EKG or other vital sign monitor (Ask your Vet what is being used)

In the surgical prep area, the abdomen is shaved and scrubbed. The bladder is emptied and the patient is moved to a surgical suite, where she is draped with special clothes or papers to isolate the area where surgery will take place.

An incision is made on the midline of the abdomen, and the three points where the ovaries and uterus attaches are tied off and cut. The abdomen is checked for bleeding and two or three layers of stitches are placed to close the incision.

It is helpful to know that should the skin stitches come out, there are two layers below holding everything closed. Sometimes skin stitches are not placed but if they are present, you will need to return in 10 to 14 days to have them removed.

The anesthesia technician continues monitoring until the pet dog wakes up and coughs out the throat tube. The patient is kept in an observation room until she is able to walk.

Any surgery is hurting so your pet must get pain medicines during surgery or immediately after surgery and to take home (Ask your Vet for Pain medicines). Most of the times the pet leaves hospital

#### What To Expect at Home

Most spay patients go home same day as if nothing had happened, although they need pain medication for a few days.

Some nausea may occur in the first couple of days after surgery and it would not be unusual for the pet to refuse food for a day or two after surgery.

As noted above, a cough may persist for a couple of days as a result of the throat tube. This should not persist longer than a couple of days.

Dogs who show a propensity to lick their stitches will need an Elizabethan or "E" collar to restrict access to the stitches. This is not very comfortable for the dog but must be used strictly until the stitches are out and the incision is healed.

Activity should be restricted during the week following surgery. Excessive activity can lead to swelling or fluid accumulation under the incision. If a fluid pocket forms, it should resolve on its own after a few weeks. If a fluid pocket forms and drains liquid from the incision, the dog should be re-checked with the veterinarian.

Spaying is one of the most important preventive health measures that can be provided for a female dog of any age.

# What About Behavioral Changes?

The female dog's reproductive tract is dormant for most of the year. It only activates for the 3-week period of heat. This means that from a behavioral stand point, the female dog acts spayed most of the time. It is unlikely that any change will be evident.

Health benefits from spaying are too important to ignore. Please call for spay scheduling for your female dog