SAG

THE CONVENTIONAL method of unsexing a female dog is by ovariohysterectomy (surgical removal of the uterine horns, ovaries and the body of the uterus). During the many years I have used this procedure, I have often encountered cases of extreme obesity, cardiac stress and urinary incontinence in the middle-aged spayed female.

According to physiologists, the female hormone plays a vital role in the distribution of adipose tissue throughout the body, and also helps control body metabolism. When a female is unsexed, fat distribution is greatly altered and the metabolic changes increase the formation of adipose tissue, resulting in obesity. When both ovaries are removed prior to or shortly after puberty, the animal tends to lack female secondary sex characteristics and is often mistaken for a male.

I prefer to perform a hysterectomy (partial spay) so that the patient's life remains as normal as possible. My first hysterectomy involved the surgical removal of one ovary, the uterine horns and the body of the uterus, leaving the cervix intact. This method eliminated the possibility of pregnancy but allowed the estrous cycle to persist, a factor objectionable to the client. It was apparent that the cervix and the remaining portion of the uterus were sufficient to bring about a normal estrous cycle.

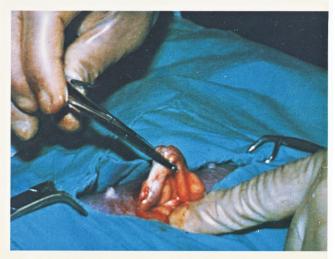
Later, I developed a more satisfactory procedure which included removal of the uterine horns (Figure 1), the body of the uterus and the entire cervix (Figures 2 & 3), leaving both ovaries intact. With this method, femininity is retained (via the female hormone) but the two objectionable factors — pregnancy and menstrual flow — are eliminated.

I perform this procedure for routine spaying or when surgical removal of the reproductive organs is indicated, as in cases of infection (metritis-pyometra) and for a more normal life for a pet:

## PARTIAL SPAY

(hysterectomy)

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**Figure 1** – Ovary and fimbria of the uterine horn. The ligature and forceps are applied in this area.



**Figure 2**—The cervix is seen just above the forceps.

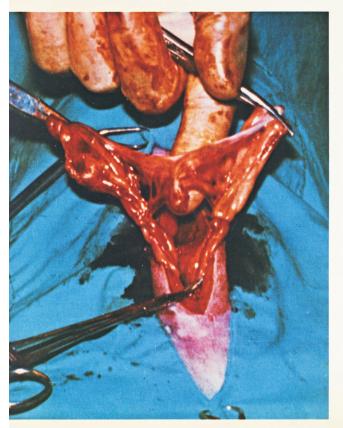


Figure 3—The excised cervix is seen at the index finger.

neoplasms. The ovaries are removed only when their presence might prove detrimental to the patient.

## Discussion

When the ovaries remain intact, the pressence of estrogen and progesterone causes a vaginal excretion, accompanied by swollen vulva, which attracts males during estrus. This undesirable attention from males can be eliminated by using chlorophyll tablets and pet deodorants.

In bitches with breast neoplasms, it is an accepted practice to perform ovariectomies. However, I recommend leaving the right ovary and excising only the left ovary. This method eliminates the necessity of making two lateral incisions when performing an ovariectomy at a later date if mammary tumors develop.

The partial spay procedure is not intended to replace the panhysterectomy but rather to give the client an option. I present the facts concerning each method, leaving the final decision to the client.

## Conclusion

THE PROBLEMS created by ovariohysterectomy (hormonal imbalance resulting in obesity, cardiac stress and urinary incontinence) are directly related to the surgery. The partial spay, on the other hand, can be performed before puberty without resulting in the loss of female secondary sex characteristics. This approach is especially valuable in large canine breeds where the surgery is more difficult to perform after the patient is 6 months old.

Most pet owners today are aware of the undesirable side effects of ovariohysterectomy in the human female. Thus, if given the option of a complete or partial spay for a pet, the client invariably requests the partial procedure.

In my opinion, the partial spay (hysterectomy) can play an important role in veterinary medicine because it results in a more nearly normal pet that has less chance of developing the physical problems usually associated with ovariohysterectomy.