

Ovariohysterectomy in Pets: A Preventive Surgical Approach for Better Health

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Abstract

Ovariohysterectomy, commonly known as spaying, is a surgical procedure that involves the removal of a female pet's ovaries and uterus. This procedure is widely recommended for its health benefits, including the prevention of reproductive disorders such as pyometra and ovarian cancer, as well as a reduction in the risk of mammary tumors. It also plays a significant role in controlling the pet population. Although ovariohysterectomy is a routine veterinary procedure, it is often surrounded by misconceptions regarding its effects on the pet's health and behaviour. This draft discusses the importance of spaying, the surgical procedure itself, the associated health benefits and common myths related to the surgery. Additionally, it provides an overview of postoperative care and the role of veterinarians in educating pet owners. Ovariohysterectomy not only contributes to the health and well-being of individual pets but also promotes responsible pet ownership by reducing overpopulation.

1. Introduction

Ovariohysterectomy, commonly referred to as spaying, is a surgical procedure performed to remove the ovaries and uterus of female animals. It is one of the most frequently performed surgeries in small animal veterinary practices, primarily aimed at population control and the prevention of reproductive diseases (Fossum, 2019). While the term may sound technical, the impact it has on the health and longevity of pets is substantial and well-documented.

Spaying is recommended not just to prevent unwanted pregnancies but also to avoid life-threatening conditions like pyometra, ovarian cysts and reproductive cancers (Johnston et al., 2001). The surgery is generally performed on dogs and cats, but it is also indicated for rabbits and other

small mammals when medically justified. With increasing awareness about animal welfare and responsible pet ownership, ovariohysterectomy has become a standard practice in pet healthcare (Kustritz, 2012).

Despite its routine nature, the decision to spay a pet often comes with many questions and misconceptions. This article provides an overview of the surgical procedure, its benefits and what pet owners and veterinary professionals should expect before, during and after the operation.

2. The Surgical Procedure

• Preoperative Considerations

Before surgery, a full physical exam and diagnostic tests such as CBC and biochemistry are performed to assess surgical and anaesthetic safety (Fossum, 2019). Young, healthy pets may not require

extensive screening, but it is highly recommended for older animals.

Fasting is usually required for 8–12 hours prior to surgery to reduce the risk of anaesthesia-related vomiting. Intravenous (IV) fluids and pain medications are often administered preoperatively to stabilize the patient and improve recovery (Howe, 2006).

- **Anaesthesia and Preparation**

The pet is anesthetized using a combination of injectable and inhalational agents. The abdominal area is shaved, scrubbed with antiseptic and draped to maintain sterility (Fossum, 2019).

- **Surgical Technique**

A midline abdominal incision is made, typically from just below the umbilicus to the pubis, depending on the animal's size.

Step 1: Ovarian Pedicle Ligation

Each ovary is isolated and its blood supply ligated carefully to prevent haemorrhage. The ovarian pedicle is severed using absorbable sutures or electrosurgical tools (Johnston et al., 2001).

Step 2: Uterine Removal

The uterine horns are traced to the uterine body near the cervix. Ligatures are placed around the uterine arteries and the uterus is removed (Fossum, 2019).

Step 3: Closure

The abdomen is closed in three layers-linea alba, subcutaneous tissue and skin. Skin sutures or staples are removed 10–14 days post-surgery.

The entire procedure usually lasts 30–60 minutes, with variations based on the pet's age and condition (Griffin, 2010).

- **Postoperative Care**

After surgery, pets are monitored during anaesthesia recovery. Analgesics and anti-

inflammatories are administered for pain relief (Howe, 2006).

- ✓ **At-home care includes:**

- Restricted activity for 10–14 days
- Use of Elizabethan collar to prevent licking
- Monitoring for signs of infection or suture complications
- Administering prescribed medications as directed

Most pets recover within a week, though full tissue healing may take up to two weeks.

3. Benefits of Ovariohysterectomy

A. Prevention of Pyometra

Pyometra, a life-threatening uterine infection, can affect up to 25% of unspayed dogs by age 10. Spaying eliminates this risk (Johnston et al., 2001).

B. Reduced Risk of Mammary Tumors

Spaying before the first heat reduces the risk of mammary tumors by up to 90%. These tumors are often malignant in both dogs and cats (Root Kustritz, 2007).

C. No Unwanted Litters

Spaying curbs pet overpopulation, which remains a significant animal welfare issue globally (Looney et al., 2008).

D. Elimination of Heat Cycles

Spayed pets no longer go through estrus, avoiding behavior changes like aggression, vocalization and restlessness (Kustritz, 2012).

E. Prevention of Ovarian and Uterine Tumors

Since both organs are removed, the chances of developing tumors in these areas are nullified (Fossum, 2019).

4. Myths and Misconceptions

“Spaying causes obesity.”

Metabolism may slow slightly, but obesity is preventable with proper diet and exercise (Kustritz, 2012).

“It’s better for her to have one litter first.”

No medical evidence supports this. In fact, early spaying is more protective against mammary tumors (Root Kustritz, 2007).

“It changes personality.”

Spaying may reduce hormonally-driven behaviour, but it does not affect temperament, affection, or intelligence (Griffin, 2010).

5. Conclusion

Ovariohysterectomy is not just a routine veterinary surgery—it is a critical investment in a pet's long-term health. With its wide-ranging benefits, from cancer prevention to behavioural improvement, spaying is an essential part of responsible pet ownership.

Veterinarians must continue to educate clients with scientific clarity and compassion, addressing myths and highlighting the many advantages of the procedure. When performed at the correct age and followed by proper aftercare, ovariohysterectomy ensures a longer, healthier and happier life for our beloved companions.

6. References

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