

Peer Reviewed

Early-Age Spay/Neuter

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It is time for the veterinary profession as a whole to endorse early-age spay/neuter procedures in order to mitigate the serious problem of pet overpopulation.

For decades, veterinarians have been taught to wait until a dog or cat is 6 months of age before performing ovariectomy or castration. Today, many shelters and high-volume shelter clinics perform sterilization surgeries in puppies and kittens as early as 6 to 8 weeks of age. In addition, some veterinary schools now teach early-age spay/neuter procedures. However, when new graduates join the veterinary workforce, they are often met with resistance from veterinarians who do not practice these early-age procedures.

Early-age spay/neuter procedures have been endorsed by the Association of Shelter Veterinarians (ASV),¹ the American Veterinary Medical Association (AVMA),² the American Animal Hospital Association (AAHA),³ and the Canadian Veterinary Medical Association (CVMA).⁴

With millions of homeless dogs and cats euthanized in animal shelters each year, it is time for veterinary professionals to actively support early-age spay/neuter procedures to help reduce pet overpopulation.

CONTINUES



We invite you to respond to this column by sending your comments to editor@cliniciansbrief.com (remember to give your name and contact information).

WHAT IS EARLY-AGE SPAY/NEUTER?

For the purpose of this discussion, early-age spay/neuter is ovariohysterectomy or castration performed at or before 5 months of age. Early-age spay/neuter encompasses two major approaches:

1. Pediatric spay/neuter
2. Five-Saves-Lives

Pediatric Spay/Neuter

Pediatric spay/neuter has been defined as ovariohysterectomy or castration between 6 and 16 weeks of age. Veterinary schools routinely recommend 6 months as the most appropriate age to spay or castrate pets, but this recommendation is based on clinical sentiment rather than scientific studies and such sentiments have changed over the decades. In the 40 years of my veterinary career, the recommendations have changed from spaying after a single litter to spaying after the first estrus to now performing spay/neuter procedures at or after 6 months of age. However, all recommendations regarding the appropriate age for spay/neuter are anecdotal, and none has strong scientific support.



KEY POINT

As early as 1996, Dr. Sherbyn Ostrich, then president of the AVMA, spoke out in support of the AVMA position statement on early-age spay/neuter:

“Lowering the number of stray dogs and cats is a high priority for anyone who cares. The AVMA is on record as endorsing early-age spay/neuter. As president of the AVMA, I feel it is unconscionable not to use early spay/neuter since it is safe and very, very effective in achieving our goals.”⁶

Historically, veterinarians have expressed two main concerns regarding spay/neuter procedures performed before 6 months of age:

1. Anesthetic risk
2. Potential for adverse physiologic effects, including obesity, urinary incontinence, urinary obstruction, musculoskeletal disorders, puppy vaginitis, and perivulvar dermatitis

Anesthetic agents used today, however, are safe in puppies and kittens as young as 6 weeks of age. In addition, most research conducted during the past 20 years has dispelled concerns about adverse physiologic effects related to pediatric spay/neuter.⁵

Compared with performing these procedures in older pets, pediatric spay/neuter is safer, easier, and quicker, with virtually no long-term adverse effects.⁵ Furthermore, the advantages associated with ovariohysterectomy and castration—decreased incidence of mammary tumors, significantly decreased risk for pyometra and other uterine diseases, and decreased roaming and adverse sexual behaviors—are all present with pediatric spay/neuter.⁵

As part of a larger effort to reduce animal overpopulation, most animal shelters strive to ensure that adopted dogs and cats, including the most frequently adopted group (ie, puppies and kittens) are sterilized. Accordingly, pediatric spay/neuter is the accepted approach toward guaranteeing that shelter animals are sterilized before adoption. Teaching and accepting the importance and the appropriateness of pediatric spay/neuter will serve as an important element in reducing pet overpopulation.

Five-Saves-Lives

Five-Saves-Lives, or Spay Before Five Months (Spay B4V), is a national spay/neuter public awareness campaign that strives to prevent unintended litters by reducing the routine spay/neuter age to 4 to 5 months in private practices. The campaign recommends that practices adopt these routine surgical procedures 4 to 8 weeks earlier than has been traditionally recommended.

Both cats and small-breed dogs can go into estrus with pregnancy risk before 6 months of age, but rarely before 5 months of age. Most veterinarians have routine puppy and kitten health maintenance programs that involve veterinary visits, vaccinations, and other routine care every 2 to 3 weeks starting at 6 weeks of age. Five-Saves-Lives promotes the addition of a spay/neuter

The Plight of Pet Overpopulation

Every year, millions of homeless and unwanted dogs and cats are euthanized in animal shelters and humane societies throughout the United States. While precise numbers are difficult to obtain, estimates range from 3 to 4 million.⁵

Because many factors have led to pet overpopulation, the solution will likely be multifaceted. Until safe and effective chemical or immunologic sterilization is available, spay/neuter will be the cornerstone of any program aimed at reducing pet overpopulation—thereby reducing the numbers of animals relinquished and euthanized each year.⁵



appointment between 4 and 5 months of age. As with pediatric spay/neuter, the procedures are faster and easier, and patients recover more quickly with fewer complications as compared with older patients.⁵ Female puppies never become pregnant, and male puppies do not develop undesirable sexual behaviors.

ESTABLISHING PROTOCOLS

Early spay/neuter allows additional time for robust immunity to develop through vaccination while ensuring that pets are neutered before sexual maturity. There is no gap in veterinary care between the vaccine series and surgical appointment; this suggests that owner compliance may be improved, as the owner establishes a routine of veterinary appointments during the wellness visits.

Most practitioners will admit that spaying a pregnant animal or one in estrus is more difficult and has increased risk for complications. Spaying females before sexual maturity avoids the stress and increased risk for complications associated with spaying dogs and cats when they are in estrus or pregnant.

THE BOTTOM LINE

Many veterinarians have been resistant or opposed to early-age spay/neuter. Yet practitioners routinely state that when these procedures are performed at an early age, they are easier, faster, and result in quicker recoveries than when performed in adults. Furthermore, research conducted over the past 2 decades has demonstrated little to no adverse physiologic effects when puppies and kittens are sterilized before sexual maturity.⁵

Because the number of puppies and kittens born each year in the United States far exceeds the number of available homes, it is time for the veterinary profession as a whole to endorse early-age spay/neuter and thereby mitigate the serious problem of pet overpopulation.

See **Aids & Resources**, back page, for references & suggested reading.



KEY POINT

Research during the past 2 decades has demonstrated little to no adverse physiologic effects of sterilization before sexual maturity.⁵

Learn More...

- Association of Shelter Veterinarians sheltervet.org
- ASPCA Professional aspcapro.org/spay-neuter-resources-for-veterinarians.php
- Humane Alliance HumaneAlliance.org
- PetSmart Charities petsmartcharities.org/resources/spaying-neutering-puppies-kittens.html