

Feline Fix by Five

Spay/Neuter Cats by 5 Months: Why the Change



Your Presenter

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Appropriate Age to Spay (or Neuter) Cats

- Have a litter first
- After the first heat cycle
- At or after 6 months of age
- 4 to 5 months of age
- Pediatric - as young as 6 – 8 weeks



Consumer Research Study



Ipsos Marketing
The Innovation and Brand Research Specialists

**PetSmart Charities
A&U Barriers**

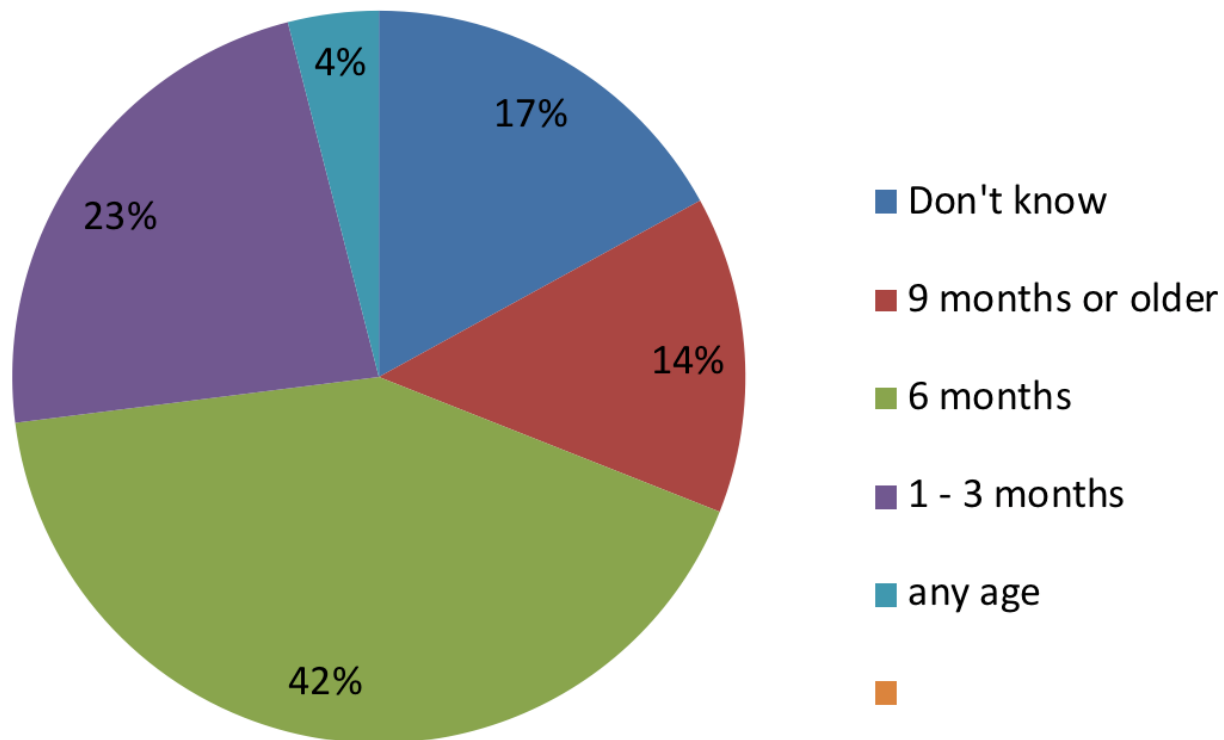


May 27, 2009



Age for Spay/Neuter?

Appropriate Age to Spay/Neuter



Veterinary Task Force on Feline Sterilization for Age of Spay/Neuter Surgery



Consensus Statement



Task Force Statement

Veterinary Task Force on Feline Sterilization Recommendations for Age of Spay and Neuter Surgery

Current recommendations for the age to sterilize (spay/neuter) cats are arbitrary and inconsistent. Adoption of evidence-based guidelines is expected to limit confusion among cat owners, reduce the risk of unwanted litters, and maximize health and welfare benefits.

A task force of veterinarians and experts selected from private and corporate veterinary practice, feline specialty practice, shelter practice, organized veterinary medicine, feline health research, behavior, and academia was convened to review the currently available evidence for the 'optimum age for spaying or neutering cats.' The Veterinary Task Force on Feline Sterilization task met on January 15, 2016 in Orlando, Florida.

The following key findings and proposals emerged from a review of the currently available scientific literature and group discussion:

1. Recommendations for the optimal age to sterilize cats may differ from the age to sterilize dogs.
2. Current scientific evidence documents benefits of spaying kittens before the first estrous cycle, including the following:
 - Decreased risk for mammary carcinoma¹⁻⁴
 - Elimination of reproductive emergencies such as pyometra and dystocia
 - Avoidance of unintended pregnancies that may occur as early as 4 months of age
 - Potential decrease in behavioral problems linked with cat relinquishment.⁵
3. Current evidence does not support an increased risk for cats of complications or long-term adverse



FELINE FIX
by FIVE MONTHS™

it saves lives

Feline Fix by Five is NOT:

- A pediatric spay/neuter program
- A low income spay/neuter program
- A sheltering program
- A rescue program
- A program for feral cats
- A program for Trap-Neuter-Return (TNR)

Endorsements



Are there medical benefits?

Hayes HM, Milne KL, Mandell CP: Epidemiological features of feline mammary carcinoma, *Vet Rec* 108:476, 1981.

Overley B, Shofer FS, Goldschmidt MH, et al: Association between ovariectomy and feline mammary carcinoma, *J Vet Intern Med* 19:560, 2005.

Is this medically sound?

Long-term outcome of gonadectomy performed at an early age or traditional age in cats

Lisa M. Howe, DVM, PhD, DACVS; Margaret R. Slater, DVM, PhD;
Harry W. Boothe, DVM, MS, DACVS; H. Phil Hobson, DVM, MS, DACVS;
Theresa W. Fossum, DVM, PhD, DACVS; Angela C. Spann, BS; W. Scott Wilkie, BS

Objective—To determine long-term results and complications of gonadectomy performed at an early age (prepubertal) or at the traditional age in cats.

Design—Cohort study.

Animals—263 cats from animal shelters.

Procedure—Cats that underwent gonadectomy were allotted to 2 groups on the basis of estimated age at surgery (traditional age, ≥ 24 weeks old; prepubertal, < 24 weeks old). Adoptive owner information was obtained from shelter records, and telephone inter-

gonadectomy of humane shelter animals may result in nearly 100% neutering compliance rates, fewer returned animals, and improved staff morale.³

In 1993, the AVMA House of Delegates approved Resolution 6, which stated: “Resolved, that AVMA supports the concept of early (8 to 16 weeks of age) ovari-hysterectomies/gonadectomies in dogs and cats in an effort to stem the overpopulation problem in these species.”¹³ Despite the passage of this resolution, acceptance of prepubertal gonadectomy by veterinarians has been slow, in part, because of concerns about anesthesia, urethral obstruction in male cats, potential behav-

Is this medically sound?

Long-term risks and benefits of early-age gonadectomy in cats

C. Victor Spain, DVM, PhD; Janet M. Scarlett, DVM, PhD; Katherine A. Houpt, VMD, PhD, DACVB

Objective—To evaluate the long-term risks and benefits of early-age gonadectomy, compared with traditional-age gonadectomy, among cats adopted from a large animal shelter.

Design—Retrospective cohort study.

Animals—1,660 cats.

Procedure—Cats underwent gonadectomy and were adopted from an animal shelter before 1 year of age; follow-up was available for as long as 11 years after

and the rate is estimated at 4.3 to 15.4 million cats/y.¹ These numbers represent cats that were never adopted from shelters because of insufficient adopters and cats that were adopted but subsequently relinquished back to the shelters, frequently when the cat developed behaviors that were unacceptable to the new owner. Typically, more than half of cats relinquished to shelters are subsequently euthanatized by the shelter, and in some shelters, the rate is > 90%.^{2,5}

Many people with humane concerns consider rou-

What about short term complications?

Short-term results and complications of prepubertal gonadectomy in cats and dogs

Lisa M. Howe, DVM, PhD

Objective—To determine short-term results and complications of prepubertal gonadectomy in cats and dogs.

Design—Prospective randomized study.

Animals—775 cats and 1,213 dogs.

Procedure—Animals undergoing gonadectomy were allotted into 3 groups on the basis of estimated age (group 1, < 12 weeks old; group 2, 12 to 23 weeks old; group 3, ≥ 24 weeks old). Complications during anesthesia, surgery, and the immediate postoperative period (7 days) were recorded. Complications were classified as major (required treatment and resulted in an increase in morbidity or mortality) or minor (required little or no treatment and caused a minimal increase in morbidity). An ANOVA was used

pliance with these programs is estimated to be < 60%.^{3,4} To increase effectiveness of population control measures, many humane organizations and veterinarians have promoted prepubertal gonadectomy, whereby animals are neutered before the onset of puberty and before adoption.⁵⁻¹¹ Prepubertal gonadectomy of animals in humane shelters can result in compliance rates of nearly 100% for neutering, fewer animals returned, and improved staff morale.³

In 1993, the AVMA House of Delegates approved the following resolution:

Resolved, that AVMA supports the concept of early (8-16 weeks of age) ovariohysterectomies/gonadectomies in dogs and cats, in an effort to stem the overpopulation problem in these species.

Is the anesthesia safe?

Early Spay-Neuter: Clinical Considerations

Margaret V. Root Kustritz, DVM, PhD, DACT

Early spay-neuter is ovariectomy or castration of puppies or kittens 6 to 14 weeks of age. Pediatric animals may have an enhanced response to relatively low doses of anesthetic agents. Animals should be fasted no more than 3 to 4 hours before surgery to prevent hypoglycemia, and hypothermia should be avoided. Heart and respiratory rates must be monitored carefully throughout anesthesia. Pediatric gonadectomy surgeries are quick with minimal bleeding. Anesthetic recovery is rapid. No significant short-term or long-term effects have been reported. Prepuberal gonadectomy is most useful for humane organizations and conscientious breeders wishing to preclude reproduction of pet dogs and cats while placing animals at a young enough age to optimize socialization and training.

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neoplasia is much less likely to develop in those aged female dogs or cats in which OHE was performed before their first estrus.^{3,4} Some studies suggest that neutered animals may have a longer life span than intact animals for reasons that are not clear.⁵⁻⁷

Anesthesia

Anesthesia in pediatric animals is not difficult but differences in pediatric physiology must be kept in mind when handling the animals, choosing anesthetic agents, and maintaining and monitoring the animals during the anesthetic episode. Pediatric animals should undergo a complete physical examination before anesthesia and surgery. Because early spay-neuter is an

What about urethral obstruction?

Root MV, Johnston SD, Johnston GR, et al: The effect of prepuberal and postpuberal gonadectomy on penile extrusion and urethral diameter in the domestic cat. Vet Radiol Ultrasound 37:363; 1996

What about orthopedic issues?

- UC Davis: Golden Retriever study (February 2013)
- UC Davis: Comparison of Labrador Retrievers with Golden Retrievers (2014)
- UC Davis: Neutering of German Shepherd Dogs (2015)

What about behavioral issues?



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Research

Development of behavior in adopted shelter kittens after gonadectomy performed at an early age or at a traditional age

Nathalie Porters ^a, Hilde de Rooster ^a, Katrien Verschueren ^b, Ingeborgh Polis ^a, Christel P.H. Moons ^c  

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<https://doi.org/10.1016/j.jveb.2014.05.003>

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Abstract

Prepubertal gonadectomy (PPG) is promoted for population control in cats, but concerns related to health and behavior still exist. From a behavioral point of view, in order for PPG to

Behavioral Effects

- Inappropriate elimination
- Fearful behavior (people/animals)
- Fearful behavior (movement/noise)
- Non-play related aggression (people)
- Non-play related aggression (animals)
- Play-related aggression (people)
- Play-related aggression (animal)
- Destruction
- Excessive vocalization
- Pica
- Sucking on fabric

What about life expectancy?



Longevity

Cats

- Sterilized females: 13.1 yrs
- Intact females: 9.5 yrs
- Sterilized males: 11.8 yrs
- Intact males: 7.5 yrs

What are the population effects?

- Unwanted litters of kittens make up the majority of cats relinquished to and euthanized in animal shelters
- Spay/neuter prior to 5 months of age will significantly reduce the incidence of unplanned unwanted litters of kittens.

Are the surgeries more difficult?

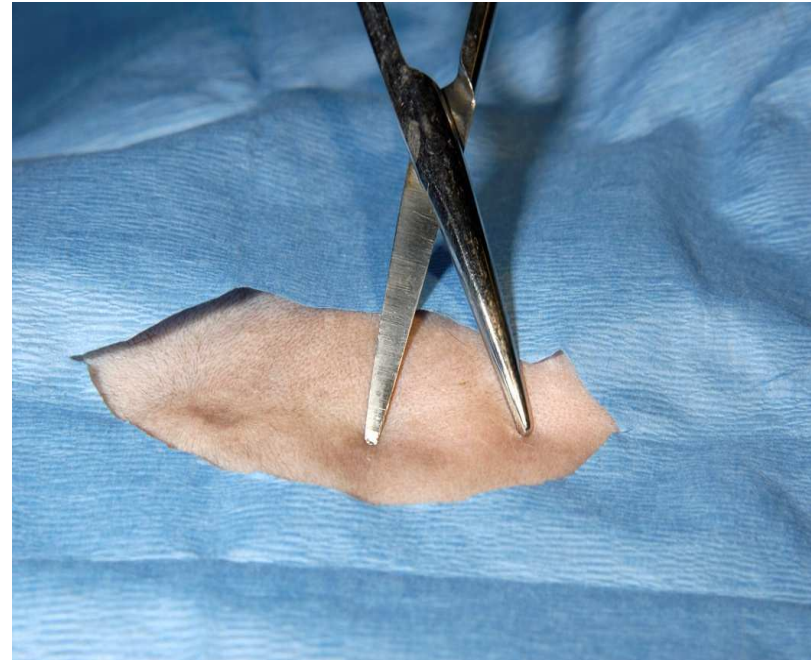
Favors early spay/neuter

I would like to thank and congratulate Dr. Rasmussen for eloquently expressing the frustrations suffered by many veterinarians who do animal welfare work (JAVMA, Jan 1, 2000, p 21). I have been a veterinarian for 12 years and involved in grass-roots animal welfare for 24 years. I have performed over 1,000 pediatric spay/neuters with zero mortality. I would like to add the following information for those colleagues who continue to criticize early spay/neuter.

Easier, faster, safer

Placement of Incision: Cat Spay

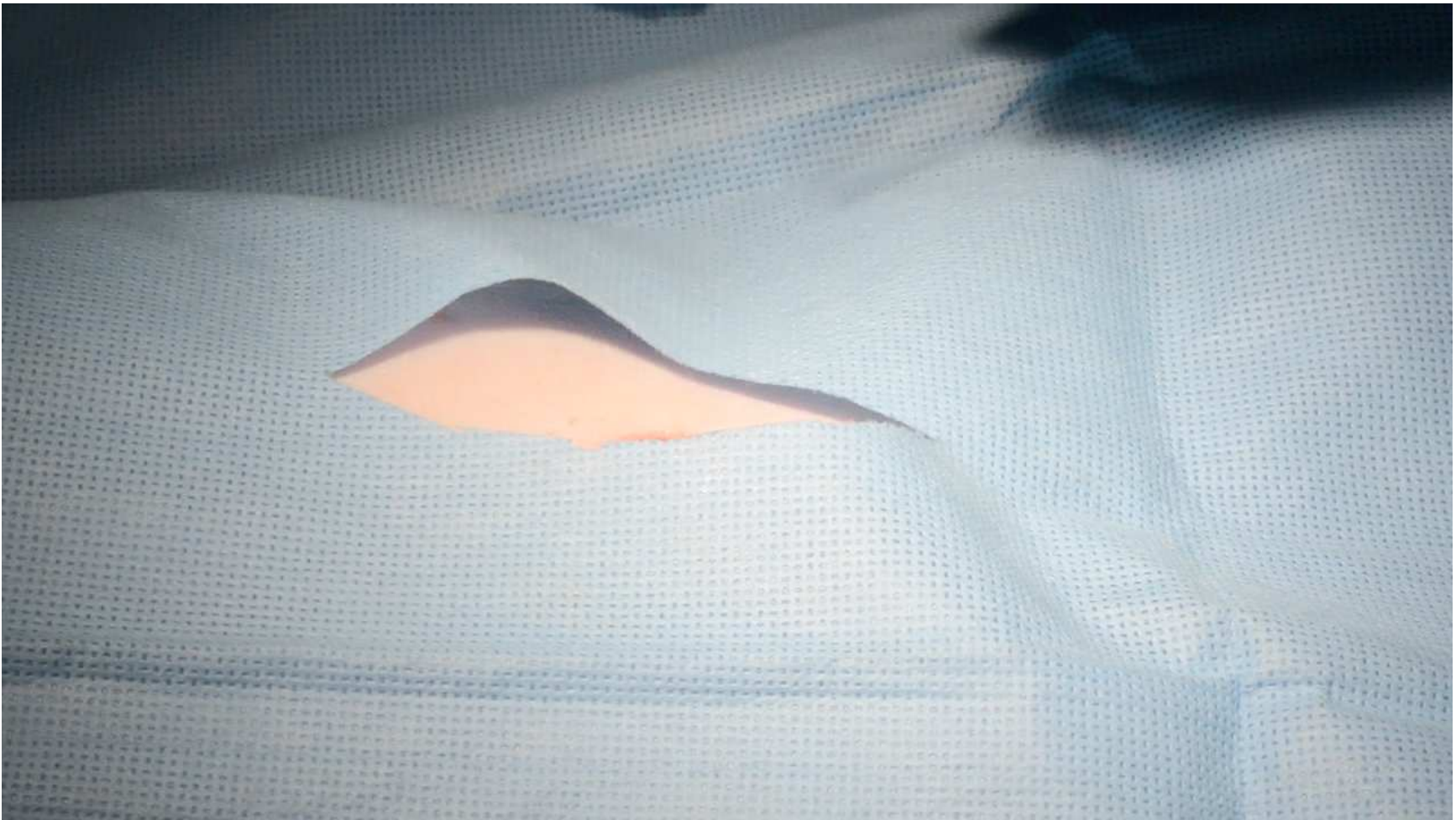
Mid point
between
umbilicus and
anterior brim of
the pubis



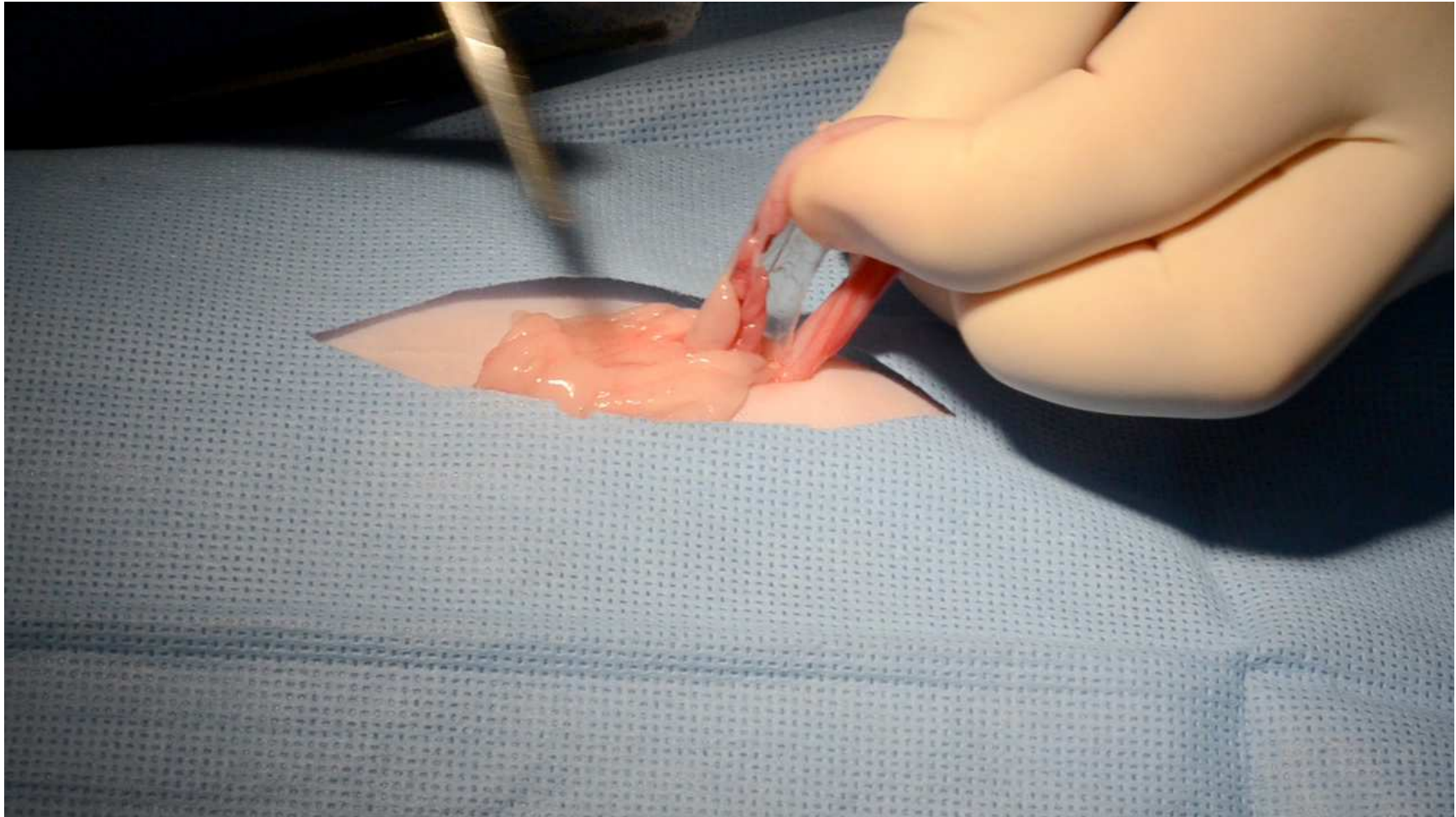
Cat Spay Incision



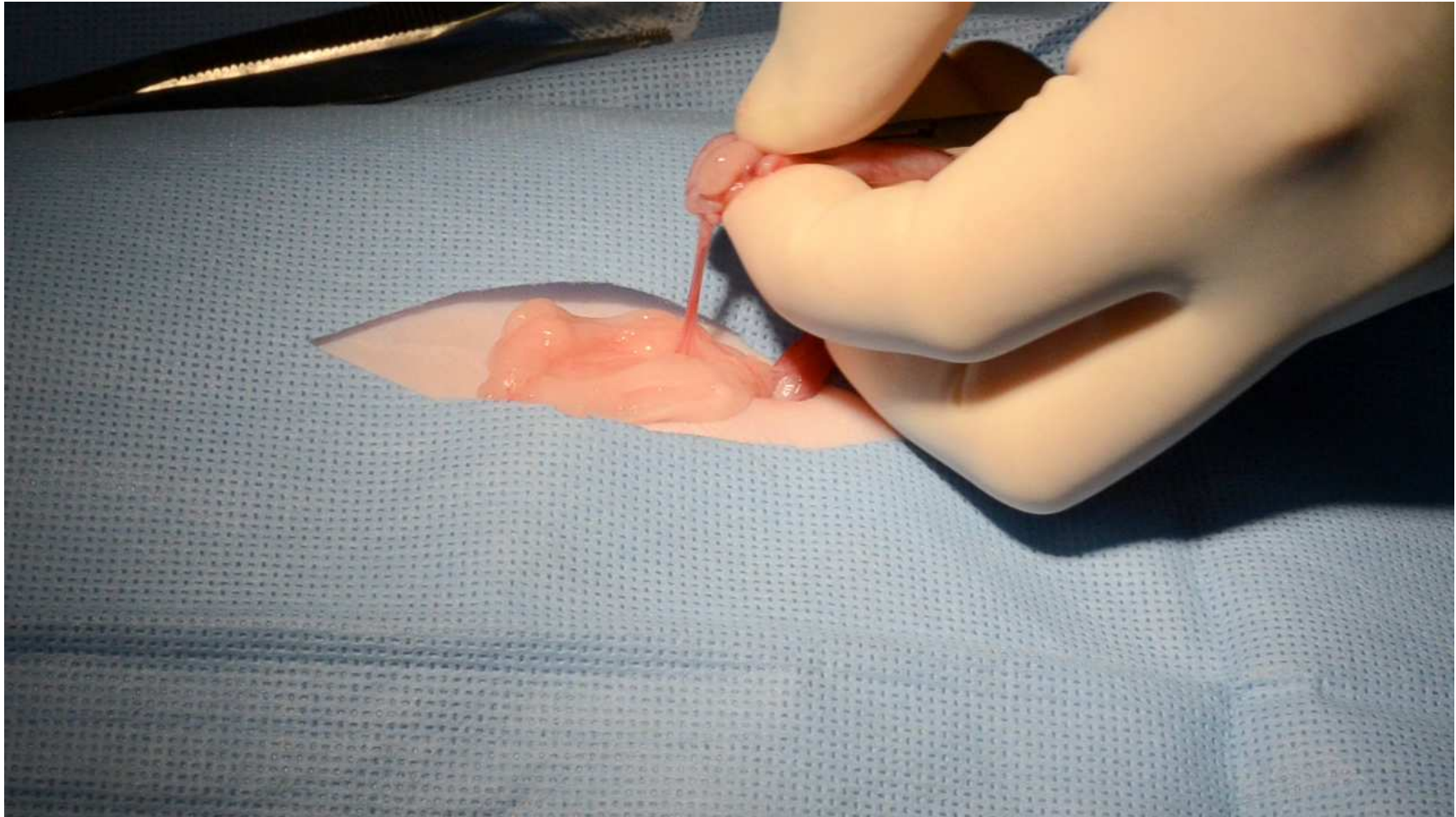
Use of Spay Hook



Cut Suspensory Ligament



Pedicle Tie



Modified Miller's Knot



The Scoring Tattoo



Implementation in Private Practice

Add one more appointment at the end of the routine kitten vaccination series

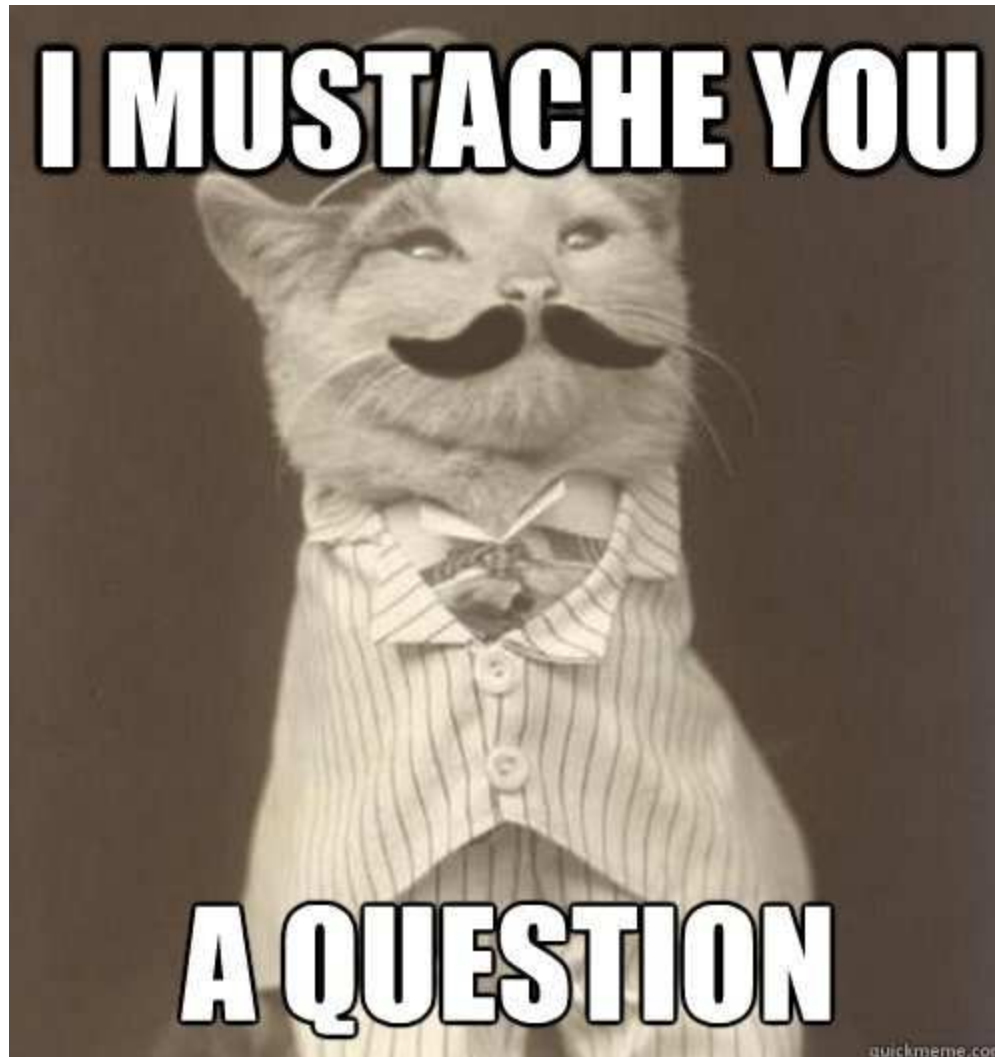
Implementation in an Animal Shelter

- **Spay neuter prior to adoption.**
- **As early as 6 – 8 weeks of age**

Conclusions

With current scientific evidence:

- There are no medical or behavioral reasons to delay spay neuter in cats after 5 months of age
- There are significant health benefits to spay neuter of cats prior to 5 months of age
- There are significant population benefits to spay neuter of cats prior to 5 months of age
- Surgeries are easier, faster, and safer prior to 5 months of age
- Implementation in a practice or shelter is simple



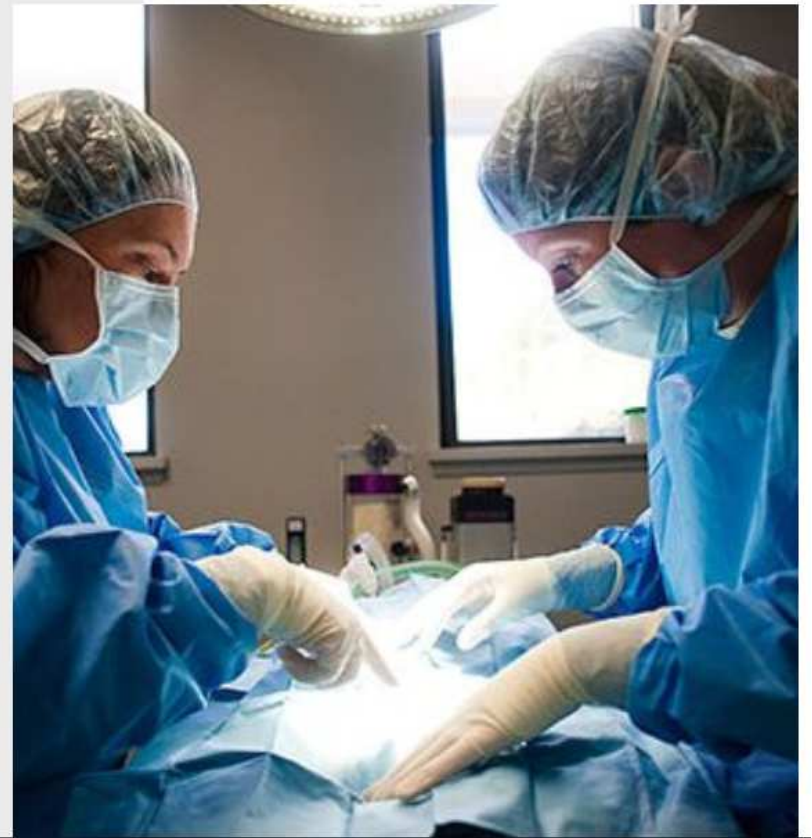


Learn from the Experts

Learn more about training through ASPCA Spay/Neuter Alliance programs.

- Veterinary Student Externship
- Clinic Consultations
- Spay/Neuter Clinic Mentorship
- Veterinarian Training
- Medical Team Training

MORE TRAINING



[ASPCApro.org/alliance](https://www.aspcapro.org/alliance)