Pet sterilization laws raise health concerns

Spayed or neutered dogs more at risk for cancers, other ills, research shows

By Kim Campbell Thornton
MSNBC contributor
updated 8:56 a.m. ET, Mon., May. 19, 2008

As legislators push for more mandatory spay and neuter laws for pets as young as 4 and 6 months in hopes of reducing the number of unwanted animals, critics are crying foul over research showing that such surgeries may raise certain health risks in dogs and therefore shouldn't be

Studies have found that spayed or neutered dogs are at increased risk for problems including certain cancers, thyroid disorder, incontinence and some of the same behavior issues that the surgeries are said to prevent.

Animal Tracks
From two kissing capybaras to a chunghan rhesus monkey, find images of animals great and small.
required.

Studies have shown that dogs that undergo spaying (removal of the ovaries and uterus) or neutering (removal of the testicles) are at increased risks for certain cancers, thyroid disorder, incontinence and some of the same behavior issues, such as aggression, that the surgeries are said to prevent.

Most of these problems aren't common to begin with, and the increased risks can depend on the type of dog and the age the surgery is performed. Still, the findings are leading some experts to say that, contrary to conventional wisdom, later spay/neuter surgery for dogs, and even vasectomies for male canines, may be better options for some animals, depending on such factors as breed and lifestyle.

The American Veterinary Medical Association has not taken a stand on spay/neuter legislation, but the American College of Theriogenologists, a group of veterinary reproduction specialists that advises the AVMA, is considering a position paper opposing the legislation at its meeting in St. Louis in August, says veterinarian John Hamil of Laguna Beach, Calif., a member of the group's task force that looked at the issue.

"What they're saying is that because there have been problems associated with spay/neuter surgery, they think it's improper for it to be mandated, much less at an early age," says Hamil. "They feel the decision should be made after discussion between the owner and veterinarian."

Proponents of spay/neuter legislation say it's a way to reduce the
numbers of animals in shelters and cut down on euthanasia rates. They also cite the health and behavior benefits of the procedures, such as prevention of mammary cancer, spraying and marking territory, and roaming.

Patty Khuly, a veterinarian in Miami, says a better solution to control the animal population than mandatory spay/neutering by a certain age is to offer the surgeries at lower costs so more pet owners can afford them and get them done according to a veterinarian's recommendations.

“I don’t believe that the fourth month is a reasonable window,” she says. "Most veterinarians would agree on that. I think low-cost spay/neuter, making it more available, is the solution, as opposed to mandating a time frame, especially when we don’t know the real impact of early spay/neuter."

For more than a decade, the cities of San Mateo and Belmont in California have required sterilization of most cats and dogs more than 6 months old. But more attention is being paid to the pros and cons of pet sterilization now because of a recent spate of legislation that has been passed or introduced. Los Angeles, for instance, passed an ordinance requiring cats and dogs more than 4 months old to be neutered or spayed by October or risk fines up to $500. Palm Beach, Fla., and North Las Vegas also have approved such measures, and dozens more cities and counties, including Chicago and Dallas, are considering them. Rhode Island is the only state to have passed a mandatory spay/neuter law, and it applies just to cats.

No one-size-fits-all answer
The idea that pets should be spayed or neutered at approximately 6 months of age or earlier dates to studies in the 1960s and 1970s showing that spaying a female before her first estrus cycle almost eliminated mammary cancer — which is common in dogs — and that spayed and neutered dogs showed a decrease in behavior problems that can be fueled by sex hormones.

Spay/neuter surgery also has other benefits, including prevention of unwanted litters, no messy twice-yearly estrus cycles in females and a reduced rate of uterine infections later in life. Spayed and neutered dogs and cats also have longer lifespans.

Since the early studies were conducted, however, research has also shown downsides to the surgeries beyond acute side effects such as bleeding and inflammation.

Margaret V. Root Kustritz, a veterinary reproduction specialist at the University of Minnesota, reviewed 200 studies and found that while
spay/neuter surgery has benefits, it is also linked to increases in the incidence of certain diseases and conditions such as bone cancer, heart tumors, hypothyroidism and canine cruciate ligament (CCL) injuries, as well as prostate cancer in male dogs and urinary incontinence in females. The extent of the risk can depend on the problem, as well as the size and sex of the dog, and the age the surgery is performed.

The risk of a type of cardiac tumor called hemangiosarcoma is five times higher in spayed female dogs than unspayed females, noted Kustritz. And neutered males have 2.4 times the risk of unneutered males. The risk was also higher for osteosarcoma (bone cancer): Dogs spayed or neutered before age 1 were up to two times as likely to develop the disease than those that hadn’t been altered.

Spaying and neutering may also heighten behavior problems such as aggression in some breeds and noise phobias in dogs altered at less than 5 months of age, she found.

While it's long been believed that spaying and neutering can improve a dog's behavior, one large study done at the University of Pennsylvania School of Veterinary Medicine found that, with a few exceptions, spaying and neutering was associated with worse behavior, although those effects were often specific to certain breeds and depended on the age at which the dog was altered.

CLICK FOR RELATED CONTENT

How our lives went to the dogs

Cats seem to fare better, though. The main risk they face from sterilization is that they can become sedentary and obese, according to Kustritz's review of studies. As a result, vets say sterilizing cats before 6 months of age is appropriate.

Reproductive choice
Still, some oppose the mandatory spay/neuter surgery for both cats and dogs based on the grounds that pet owners may not be able to afford the surgery if reduced-cost programs aren't available. Plus, they argue, people should have a choice.

In San Mateo, Calif., Peninsula Humane Society president Ken White says such legislation provides a one-approach answer to a problem that is different from community to community.

White believes low-cost or free spay/neuter programs are a better way to reduce the number of unwanted animals, based on what’s worked in San Mateo. The numbers of animals requiring euthanasia dropped dramatically — a 93 percent reduction since 1970 — as the humane
society added ways for people to take advantage of low-cost and no-cost spay/neuter programs.

Stephanie Shain, director of outreach for the Humane Society of the United States, says that in general the organization is in favor of spay/neuter laws but "we look at every piece of legislation individually. We generally recommend that those decisions are made with a veterinarian. If an individual pet owner feels they want to wait longer or their veterinarian feels they should wait longer, that's their choice."

Veterinarians should consider the age for spay/neuter surgery based on the individual animal rather than rely on the traditional 6-month standard, says Khuly.

For instance, giant dog breeds are more at risk for some types of cancer, and akitas, German shepherds, golden and Labrador retrievers, Newfoundlands, poodles and Saint Bernards are among the breeds at higher risk for CCL ruptures.

"It seems that the bigger the dog, the less desirable it is to spay them early," says Hamil. In his practice, he recommends spaying or neutering large or giant-breed dogs later than small or medium-size dogs.

Some veterinarians suggest spaying females at 12 to 14 months of age, after the growth plates have closed and between estrus cycles. Hamil says that’s not unreasonable.

A kinder cut?
Vasectomy is an option, although a rather uncommon one, for dogs that participate in sports with their owners. The main advantage is better musculature, which can help with arthritis later in life, says Khuly. A vasectomy prevents procreation but keeps testosterone production.

"I think it makes a lot more sense to consider a vasectomy," says Khuly. "Males with their testosterone really do have some advantages over those that don’t have their testosterone."

While experts debate the timing of spay/neuter surgery, they generally agree that the benefits outweigh the risks.

"The disadvantages, although real, are not stark," Hamil says. "It’s not like if you neuter them they’re going to get [bone cancer]. You would
have a very slight increase in incidence, and it’s going to be breed-related ... [Whatever the increase is] that’s not a very big reason not to spay or neuter your dog.”

_Kim Campbell Thornton is an award-winning author who has written many articles and more than a dozen books about dogs and cats. She belongs to the Dog Writers Association of America and is past president of the Cat Writers Association. She shares her home in California with three Cavalier King Charles spaniels and one African ringneck parakeet._

© 2008 MSNBC Interactive