

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

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Abstract

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

Design—Retrospective cohort study.

Animals—1,842 dogs.

Procedure—Dogs 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 surgery. Adopters completed a questionnaire about their dogs' behavior and medical history. When possible, the dogs' veterinary records were reviewed. Associations between the occurrence of 56 medical and behavioral conditions and dogs' age at gonadectomy were evaluated.

Results—Among female dogs, early-age gonadectomy was associated with increased rate of cystitis and decreasing age at gonadectomy was associated with increased rate of urinary incontinence. Among male and female dogs with early-age gonadectomy, hip dysplasia, noise phobias, and sexual behaviors were increased, whereas obesity, separation anxiety, escaping behaviors, inappropriate elimination when frightened, and relinquishment for any reason were decreased.

Conclusions and Clinical Relevance—Because early-age gonadectomy appears to offer more benefits than risks for male dogs, animal shelters can safely gonadectomize male dogs at a young age and veterinary practitioners should consider recommending routine gonadectomy for client-owned male dogs before the traditional age of 6 to 8 months. For female dogs, however, increased urinary incontinence suggests that delaying gonadectomy until at least 3 months of age may be beneficial. (*J Am Vet Med Assoc* 2004;224:380–387)

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