

## **VETERINARIAN SURVEY OF STERILIZATION METHODS PROVIDED AND KNOWLEDGE OF LONG-TERM HEALTH RISKS**

Michelle Anne Kutzler, Oregon State University, Corvallis, Oregon, USA

Elective sterilization of pet dogs is a common surgical procedure performed in veterinary practice. The main benefit of sterilization is population control and the reduction in euthanasia of unwanted dogs. The most common methods for sterilizing female and male dogs are ovariohysterectomy (spay; which removes both the ovaries and the uterus) and castration (neuter; which removes the testicles), respectively. However, there is mounting evidence supporting the development of long-term health complications following with surgical sterilization with gonad removal. Gonadal removal results in the inability for gonadal steroid hormones to feedback upon the hypothalamus and anterior pituitary, and this results in a rapid increase in luteinizing hormone (LH) concentrations. LH concentrations remain permanently elevated for the life of the dog. The objective of this study was to determine if: (1) veterinarians were aware of the long-term health complications and (2) veterinarians were offering alternatives to traditional surgical sterilization. One hundred surveys were distributed during two lectures given at the 2017 AVMA convention and 81 were returned. Nearly all of the respondents said they performed routine spays and neuters in their practice (75/81 or 92.6%). Those responding that they did not perform routine spays and neuters commented that they worked in a specialty practice (emergency (n=1), behavior (n=2)) or worked for the government (n=1). No respondents were performing intratesticular injections for chemical castration in dogs. The same number of respondents reported performing OSS or vasectomies (6/81 or 7.4%) in dogs. It is of interest to note that only 3 of the respondents (3.7%) answered affirmatively to both questions. Slightly more respondents (7/80 or 8.7%) said that they offered other methods of permanent/long-term sterilization in dogs. Six of these respondents were offering ovariectomies and one was offering tubal ligation. It is interesting to note that none of these respondents offered vasectomies. One of the respondents offering ovariectomies and one of the respondents offering tubal ligations also offered ovary-sparing hysterectomies. The majority of respondents (58/79 or 73.4%) reported discussing long-term health risks of traditional spays and neuters with dog owners prior to surgery. Seven of these respondents commented that these discussions were "just starting" or "not done routinely" or "only if clients asked". The same survey will be distributed during four lectures at the 2018 AVMA convention to compare responses between year and these results will be presented at the ACCD symposium.