Oral presentations

Vulval conformation in the entire bitch and the effects of pre and post-pubertal neutering on vulva development and urogenital disease

Jasmine Godfrey-Hunt¹, Caitlin Pagett¹, Rachel Moxon², Gary England¹

- 1 University of Nottingham, Nottingham, United Kingdom
- 2 Guide Dogs Breeding Centre, Warwickshire, United Kingdom

OBJECTIVES

- Describe normal vulval appearance for entire adult bitches, and compare to bitches neutered pre-pubertally and post-pubertally
- Examine associations between vulval development and appearance and urogenital disease

METHODS

Digital images of the vulva and vulval measurements were analysed from 412 adult large-breed bitches (106 entire, 155 neutered pre-pubertally and 151 neutered post-pubertally). Vulva size (cm) and development, vulval dorsal skin fold characteristics, recessed and juvenile vulval appearance were described and compared between the groups. Retrospective examination of health records identified cases of urogenital disease.

RESULTS

Experiencing puberty resulted in greater vulval development; pre-pubertally neutered bitches had significantly smaller vulvas than post-pubertally neutered and entire bitches ($P < 0.001$). There was no difference in vulva length and width between bitches neutered post-pubertally and entire bitches. Recessed and juvenile vulvas were more prevalent in pre-pubertally neutered bitches at 17-months of age (12.9% and 15.0% respectively, compared to 2.9% and 1.4% for post-pubertally neutered bitches). Prevalence of UTI was greater in bitches neutered pre-pubertally (9.0% compared to 2.0%; $P = 0.007$).

STATEMENT (CONCLUSIONS)

Neutering and experiencing puberty impacts vulval development and subsequent predisposition to urogenital disease in bitches, although the incidence of disease was low. Examination of the vulva could be considered as part of routine decision making regarding neutering.

Hot dogs — Which dog types have highest risk of heat related illness in the UK?

Emily Hall¹, Anne Carter¹, Dan O'Neill²

- 1 Nottingham Trent University, Nottingham, United Kingdom
- 2 Royal Veterinary College, London, United Kingdom

OBJECTIVES

Heat related illness can result when dogs are trapped in hot environments or exercised beyond their cooling capacity. As environmental temperatures increase due to climate change, heat related illness cases are likely to increase in frequency. This study aimed to identify risk factors for heat related illness, helping clinicians to identify clients with at-risk dogs for targeted prevention strategies.

METHODS

Heat related illness cases were identified from clinical records of primary-care practices participating in VetCompass™ during 2016. Demographic data were

extracted, and risk factors analysis used multivariable logistic regression modelling.

RESULTS

The study identified 390 heat related illness cases during 2016 from 905,543 dogs overall (incidence 0.04%, 95%CI 0.04-0.05%). Compared to the most common UK breed (Labrador Retriever), breeds at highest odds were Chow Chow (odds ratio [OR] 16.17, 95%CI = 6.05-43.21) and Bulldog (OR 13.54, 95%CI = 7.81-23.50). French Bulldog, Dogue de Bordeaux, Greyhound, Cavalier King Charles Spaniel, Pug, Springer Spaniel and Golden Retriever also showed increased odds. Brachycephalic dogs had increased odds compared to mesocephalic dogs (OR 2.1, 95%CI = 1.68-2.64). Dogs weighing at or above their breed mean had increased odds compared to dogs below the breed mean (OR 1.42, 95%CI = 1.12-1.8). Dogs weighing >50kg had increased odds compared to <10kg (OR 3.42, 95%CI = 1.54-7.57).

STATEMENT (CONCLUSIONS)

This study identifies breeds with increased heat related illness risk, using big data to highlight brachycephaly and increased bodyweight as additional risk factors. Veterinarians should advise caution when exposing dogs of these predisposed breeds, giant breeds, brachycephalic types, and possibly obese dogs to hot environments or strenuous exercise in warm weather.