OBJECTIVES

The efficacy of a novel oral endectocide containing moxidectin, sarolaner and pyrantel was investigated in client-owned dogs with natural infections of *Toxocara canis*, *Toxascaris leonina*, *Ancylostoma caninum* and *Uncinaria stenocephala*.

METHODS

Dogs infected with any of the four gastrointestinal nematode species were enrolled in this controlled, masked, randomized study. In total, 194 dogs were treated once orally with the combination of sarolaner (1.2 to 2.4 mg/kg), moxidectin (24 to 48 µg/kg) and pyrantel (5 to 10 mg/kg) and 97 dogs were treated with a positive control product containing afoxolaner (2.50–5.36 mg/kg) and milbemycin oxime (0.50–1.07 mg/kg). Faecal egg counts were conducted before, and 7 days after treatment administration. Efficacy was based on the post-treatment reduction in geometric mean egg counts (per gram faeces) compared to pre-treatment.

RESULTS

Two hundred dogs were infected with *T. canis*, 80 with *A. caninum*, 36 with *U. stenocephala*, and 16 with *T. leonina*. Fifty dogs had mixed infections with two or more species. Post-treatment geometric mean fecal egg counts for *T. canis*, *A. caninum*, *T. leonina*, and *U. stenocephala* relative to pretreatment counts were significantly ($P < 0.0001$) reduced by $\geq 98.3\%$ in the group treated with the combination of sarolaner, moxidectin and pyrantel, and by $\geq 97.4\%$ in the afoxolaner and milbemycin oxime-treated group. Both products were well tolerated.

STATEMENT (CONCLUSIONS)

Oral administration of the combination of 1.2 mg/kg sarolaner, 24 µg/kg moxidectin and 5.0 mg/kg pyrantel provided effective treatment of roundworm and hookworm infection in dogs.

Do brachycephalic and non-brachycephalic dogs really differ in their frequency of common health problems?

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OBJECTIVES

Brachycephalic dogs are commonly stated to have poorer health, but is this really true? This study aimed to compare the frequency of common disorders between dog breeds of differing skull lengths.

METHODS

The study comprised dogs within VetCompass™ attending primary-care practices during 2016. Breeds were

classified by skull length: brachycephalic, crossbreed, dolichocephalic and mesocephalic. Disorders were manually coded. Risk factors were analysed using multivariable logistic regression.

RESULTS

The study included 22,333 dogs. Brachycephalic dogs ($N = 4169$, 18.74%) had increased odds of eight out of 13 disorders (62%) compared with dolichocephalic dogs (1879, 8.45%). These were: upper respiratory tract disorder (OR: 2.45, 95% CI 1.72–3.49, $P < 0.001$), skin disorder (OR: 1.3, 95% CI 1.10–1.54, $P = 0.002$), ophthalmological disorder (OR: 1.64, 95% CI 1.32–2.03, $P < 0.001$), obesity (OR: 1.90, 95% CI 1.48–2.46, $P < 0.001$), neoplasia (OR: 1.45, 95% CI 1.08–1.93, $P = 0.013$), mass (1.45 95% CI 1.09–1.92, $P = 0.011$), ear disorders (OR: 1.31, 95% CI 1.06–1.61, $P = 0.012$) and anal sac disorder (OR: 1.48, 95% CI 1.14–1.91, $P = 0.003$). Brachycephalic dogs had lower odds of dental disorders (OR: 0.79, 95% CI 0.67–0.93, $P = 0.004$) and traumatic injuries (OR: 0.73, 95% CI 0.55–0.97, $P = 0.03$) compared with dolichocephalic dogs.

STATEMENT (CONCLUSIONS)

The results provide strong evidence that shorter skull length is associated with increased risk of common diseases in dogs. Veterinarians can use this information to help inform current and potential owners of brachycephalic breeds about how to mitigate expected health problems.