

VET RECORD

Nearly one in three pugs has an abnormal gait

This might be more serious health issue than previously thought, say Swedish researchers

Nearly one in three pugs has an abnormal gait, which in turn is linked to other health issues, finds a Swedish study of owners of the breed, and published online in **Vet Record**.

The findings suggest that gait abnormalities might be rather more serious than previously thought, say the researchers.

A growing body of evidence indicates that pugs are prone to various orthopaedic and neurological problems, but it's not clear how common these conditions might be.

In a bid to find out, the research team quizzed the owners of 2374 pugs who were registered with the Swedish Kennel Club, and aged 1, 5, and 8 years old in 2015/16.

Pug owners were asked whether their dogs had any gait problems, and if so, how long these had been going on.

Gait abnormalities included lameness, poor coordination (ataxia), weakness, as well as any indirect signs of gait abnormality, such as inability to jump, and abnormal wearing of the nails and the skin on their paws.

They were also asked about their dog's general health, and encouraged to send in video footage of their pet walking slowly back and forth on a leash, including a side view.

Some 550 pug owners responded to the questionnaire (26% response rate) and after excluding 30 accompanying videos for technical/quality reasons, 59 were assessed by two veterinary neurologists.

Just under 80 percent of pug owners (381) thought their dog's gait was normal, while 169 described this as abnormal. In 4 percent of the pugs, the problem had lasted less than a month; in 16 percent, it had gone on for longer.

Among the 128 respondents who said their pet had worn down their nails/paw skin--a sign of gait abnormalities, 57 owners felt their dogs had a normal gait.

Some 46 of the 59 owners who submitted a video also claimed their dogs had a normal gait (78%), but expert analysis suggested this figure was lower at just under 68 percent (40 dogs).

When all the cases were added up, a prevalence of gait problems of just under 31 percent emerged across the group.

On average, pugs were 2 years old when the gait abnormality first started, with front leg problems tending to show up earlier than problems with the back legs. But gait abnormalities were strongly associated with older age.

They were also associated with breathing problems and excessive scratching around the neck/ears and head. And pugs with abnormal gait were more likely to have incontinence issues.

Previous research has linked overweight with breathing problems in short nosed, flat faced (brachycephalic) breeds, like pugs. But the researchers found no association between weight and gait abnormalities in these dogs.

Forty seven owners said their dogs had been put to sleep: abnormal gait was the single most frequently cited cause (17/59; just under 29%), “which suggests gait abnormalities to be a more significant health problem than what previous published scientific literature has suggested,” comment the researchers.

Orthopaedic and/or neurological conditions can cause abnormal gait, they point out.

“Although this study did not aim to differentiate orthopaedic from neurological causes for gait abnormalities, the high prevalence of wearing of nails reported in the questionnaires, and the fact that lameness was not a common finding in the submitted videos, suggest that the majority of gait abnormalities in the pugs were indeed related to neurological rather than orthopaedic disorders,” they explain.

The researchers acknowledge that the response rate for their questionnaire wasn't very high, although this might have been influenced by the Swedish petition for the right of brachycephalic breeds to breathe, which launched the same year as the survey, they suggest.

But they nevertheless conclude that the prevalence of gait abnormalities was “high,” which indicates that these may be more of a health problem than previously thought.