

Gait Abnormalities in Pugs

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In the Literature

Rohdin C, Jäderlund KH, Ljungvall I, Lindblad-Toh K, Häggström J. High prevalence of gait abnormalities in pugs. *Vet Rec.* 2018; 182(6):167.

FROM THE PAGE ...

Gait abnormalities originating from orthopedic and/or neurologic disease are commonly observed in brachycephalic breeds, and the popularity of the pug breed requires veterinarians to be aware of common diseases in pugs.

A group in Sweden, where nearly all pugs are universally registered with the national kennel club, surveyed pug owners to assess gait abnormalities. Owners were asked to assess lameness, ataxia, inability to jump, and wearing of the dorsal surface of the nails or skin on paws. Of the questionnaires sent, 26% ($n = 550$) were returned, and 59 videos suitable for inclusion were submitted.

Most respondents (79.6%) described their dog as having a normal gait, whereas 20.4% described short-term or chronic gait abnormalities. However, 10.3% of the owners who described their dog as having a normal gait also noted wearing of nails or dorsum of paws, increasing the total percentage of pugs with a likely abnormality to 30.76%. Most owners described a slow onset of signs. Median age of abnormality identification was 2 years; 14.3% of pugs were described as having an abnormality by 1 year of age and 46.3% by 8 years of age. There was an association between other possible neurologic signs (eg, scratching at the neck, seizures, syncope, fly biting, licking the air) and gait abnormalities. Dyspnea was also associated with gait abnormalities. Among dogs with abnormal gaits, thoracic limb involvement was more common than pelvic limb involvement (51.3% vs 17.7%); 31% of pugs with abnormal gaits were affected in all 4 limbs.

In a multivariate analysis, age, dyspnea, and scratching around the neck, ears, and

head were most commonly found to correlate with owner-perceived gait abnormality. Video analysis found 23.9% of dogs classified by their owner as normal were abnormal when evaluated by a neurologist. In addition, 28.8% cited gait abnormality as the cause of euthanasia or death. This study shows that a large number of pugs have gait abnormalities and that these abnormalities are seen early in life, are significant, and worsen with age.

... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Gait abnormalities are common in the pug breed; owners should be made aware of this and be educated on what to look for when assessing their dog's gait (eg, wearing of tops of nails or dorsum of paws).
- 2** Gait abnormalities in all 4 limbs are frequently associated with other neurologic or respiratory diseases; thus, these patients should also be assessed for such diseases.
- 3** Owners should be advised that gait abnormalities are likely to worsen with age.