Occurrences of heart disease in apparently healthy cats in Klang Valley, Malaysia

ABSTRACT

Objective: Annual health screening inclusive of heart workup is recommended for the detection of heart diseases, especially in asymptomatic patients (no clinical signs). This study determined the occurrences of the common heart disease and the risk factors in apparently healthy cats. Material and methods: This prospective study that screened 59 healthy cats and the status of the heart were evaluated based on a combination of findings from physical examination, electrocardiography, blood pressure measurement, routine blood test, urinalysis, and total thyroid level. Results: Approximately 40.7% (n = 24/59) of the apparently healthy cats were diagnosed with heart disease hypertrophic cardiomyopathy (62.5%) remains to be the most commonly diagnosed. The mean age was 4.9-year old (age range, 7-month-old to 19-year-old). The prevalence was higher in males (45.0%; n = 17/38) cats, especially the domestic shorthairs (46.0%; n = 11/24). Among the healthy cats with vertebral heart scale (VHS) > 8.0, only 52% (n = 12/23) of them were diagnosed with cardiomyopathy. However, 33% (n = 12/36) of the cats with normal VHS ≤ 7.9 were diagnosed with heart disease. Consistently, all healthy cats with abnormal heart sounds were diagnosed with heart disease. About 31.4% (n = 16/51) of these cats with typical heart sound had cardiomyopathy too. Conclusion: The occurrence of cardiomyopathy in apparently healthy cats has no association with the patient's age, sex, and VHS, except for the heart sound. Echocardiography remains the best diagnostic tool, as normal heart size and normal heart sound do not exclude cardiomyopathy in this group of apparently healthy cats.

Keyword: Feline; Asymptomatic; Pre-clinical; Cardiomyopathy; Healthy; Risk factors