

عنوان مقاله:

Comparative study of echocardiographic parameters in healthy and dilated cardiomyopathy-affected dogs

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خلاصه مقاله:

Echocardiography is a non-invasive and gold standard imaging tool for diagnosing dilated cardiomyopathy (DCM) in dogs. This study aimed to compare the echocardiographic parameters between healthy and DCM-affected dogs. A total of 52 client-owned dogs, comprising 38 males and 14 females, were included. Among these, 24 dogs (46.15%) were classified as healthy controls and 28 dogs (53.85%) were part of DCM group. On breed-wise prevalence, it was reported that Labrador Retriever breeds showed a higher incidence of DCM than the others. The comparative studies of echocardiographic parameters showed that DCM-affected dogs had significantly higher values in left ventricular long axis length at -end diastole (LVLdA4C) and -end systole (LVLsA4C), end diastolic volume (EDV), end systolic volume (ESV), left atrium (LA)/aorta diameter (Ao) ratio, left ventricular internal dimension at systole (LVIDs), and end point septal separation (EPSS), as well as significantly lower values in left ventricular contractility indices such as fractional shortening (FS) and ejection fraction (EF) compared to healthy dogs. Also, receiver operating characteristic curves were made to determine the optimal cut-off points for each echocardiographic parameter with specificity and sensitivity for diagnosing DCM. Significant areas under the curve were observed for parameters such as LVIDs, EF, FS, LA/Ao, EPSS, LVLdA4C, LVLsA4C, left ventricular EDV, left ventricular ESV, and ESV for DCM-affected dogs. This cut-off value can be used as an early diagnosis of DCM through echocardiography, facilitating timely clinical interventions and management strategies for improved quality of life in dogs.

کلمات کلیدی:

Cut-off value, Dilated cardiomyopathy, Dog, Echocardiography, Healthy

