Reviewer's report

Title: Left Ventricular Strain Distribution in Healthy Dogs and in Dogs with Tachycardia-induced Dilated Cardiomyopathy

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Reviewer: Carlos G Santos-Gallego

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The article reports 2 main findings: 1) the normal references values of speckle-echocardiography in mongrel dogs; 2) there is an increase in of strains from base to apex; 3) in tachycardia-induced cardiomyopathy, there is a decrease in strains, more pronounced in the apex. The only novel and interesting finding is the first one; the second and third findings are already reported in literature (specifically for finding 2, there are several previous articles already describing those findings in humans), which greatly reduces the impact and novelty of the paper.

IT is surprising for this reviewer that there is not much difference in Heart rate after pacemaker (124 bpm at baseline, 159 afterwards).

The authors report that "heart failure was confirmed by echo". HF is diagnosed by signs or by BNP or by chest Xray, but by echo? which echo findings were considered diagnostic of HF (pericardial effusion, ...)? the authors should report them.

the authors indicate in the discussion "dilated cardiomyopathy has a larger effec in apical segments, this may be puzzling since tachycardia should have the same impact in all the heart regions”. The authors should take into account that pacing is being performed from the RV apex, therefore, the LV apex is clearly more affected than the rest of segments.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

No conflict of interest