Reviewer’s report

Title: Echocardiographic evidence of left ventricular untwisting-filling interplay

Version: 0 Date: 04 Jan 2020

Reviewer: Ivan Stankovic

Reviewer's report:

This is an elegant, mostly technical research paper.

The authors developed the customized software to assess DIVPG from color Doppler M-mode data and further compared it to the standard indices of LV diastolic function and ST-derived untwisting rate. For most of us, the way how DIVPG was assess is a "black box" and the paper could benefit from a more detailed figure showing how software really works (in a step-by-step fashion).

A potential clinical relevance of assessing DIVPG on top of conventional diastolic parameters is unclear.

When using the current guideline-proposed algorithm for assessing LV diastolic function, many patients fall into "the gray zone". The authors could speculate if a non-invasive DIVPD could help in narrowing this "gray zone".

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