ATM loop, ATM4CV, and ATM3CV) was found to be significantly correlated with speckle-tracking radial dyssynchrony in patients with non-ischemic dilated cardiomyopathy. Anatol J Cardiol 2014 June 23. Epub of print.


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Author’s Reply

To the Editor,

We would like to thank the authors of the letter for their interest about our article in press entitled “Apical transverse motion is associated with speckle-tracking radial dyssynchrony in patients with non-ischemic dilated cardiomyopathy,” published in this issue of The Anatolian Journal of Cardiology (1). Apical transverse motion (ATM), to quantify apical rocking, has recently been proposed by Voigt et al. (2) as a new parameter for assessing left ventricular (LV) dyssynchrony. They demonstrated that ATM contained information on both regional and temporal function inhomogeneities of the LV and that it has a potential role in the clinical context.

In our study, we investigated the relation of the ATM with LV radial dyssynchrony assessed by speckle-tracking echocardiography, which is a reliable indicator of regional myocardial contraction (3, 4), in patients with non-ischemic dilated cardiomyopathy. Speckle-tracking analysis, myocardial rotation, twist, torsion, and ATM analysis were performed as previously described (2, 3, 5). After the analysis, ATM (ATM loop, ATM4CV, and ATM3CV) was found to be significantly correlated to the speckle-tracking derived radial dyssynchrony, and a 2.5 mm cut-off value for ATM loop could distinguish between patients with and without radial dyssynchrony, with high sensitivity and specificity. Patients with radial dyssynchrony also showed disturbed rotational dynamics and significantly decreased LV twist and torsion.

Despite a large number of publications in this field, we currently cannot advise one ideal parameter for the success of cardiac resynchronization therapy (CRT). Multiple interrelated mechanisms, including myocardial viability within the paced area, underlying myocardial conditions such as fibrosis and hypertrophy, and location of the pacing lead, may affect the response to CRT. However, echocardiography has an attractive role in guiding us for understanding how CRT actually works and how to select candidates for this specific therapy. Because up to 30% of patients undergoing CRT do not respond favourably with the currently accepted criteria for the patient selection (QRS duration, NYHA class, and ejection fraction), several echocardiographic methods have been identified so far to quantify LV dyssynchrony. We believe that the evaluation of ATM together with other echocardiographic methods may be practical and useful for the selection of CRT candidates.

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References


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Could the data of home blood pressure monitoring be used to evaluate the risk of subclinical target organ damage in hypertensive patients?

To the Editor,

We thank Her et al. (1) for their study published in the December 2014 issue of Anatol J Cardiol. This research gave us the idea on how to use the data from home blood pressure monitoring (HBPM) for predicting subclinical target organ damage (TOD) in patients with hypertension treated in primary care. In our opinion, the constructed regression models are potentially appropriate for creating a relatively simple risk prediction model for subclinical TOD. Such a risk calculator is favorable for long-term follow-up facilitated by HBPM in patients with uncomplicated hypertension. A recently conducted study by Kiselev et al. (2)
showed that HBPM with patients’ feedback via text messages during a 12-month period is associated with a five-fold frequent achievement of a goal blood pressure (BP). The intervals between requests in this study depend on the level of BP or change in medication. It would be interesting to integrate the risk of TOD for tailoring the intensity of HBPM (or office visits) and determining the interval to goal BP achievement according to patients’ TOD risk. In this context, we would deeply appreciate if the authors could share some useful data with us. 1) Were the variables in the constructed regression models categorical or numerical? 2) Did you compare the prognostic significance of HBPM and ambulatory BP monitoring (ABPM) after adjustment for age and gender?

In Russia, the rate of ABPM in primary care is very low. According to the data from the Russian RECVASA registry (3), ABPM was done in only 0.7% of the hypertensive patients. Thus, HBPM seems more suitable for long-term follow-up in Russian patients with hypertension.

We suppose that the findings of the study by Her et al. (1) should be translated in clinical practice because the role of HBPM is now well established (4).

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