Format for ANSWERING REVIEWERS

December 23th, 2014

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 14765 review.doc).

Title: Minimizing right ventricular pacing in sinus node disease: sometimes the cure is worse than the disease.

Authors: Elia De Maria MD[1], Alina Olaru MD[2], Stefano Cappelli MD[1]

Affiliations:
[1] Cardiology Unit, Ramazzini Hospital, Via Molinari 1, , Carpi (Modena), Italy. postcode 41012.
[2] Department of Cardiovascular Medicine, University of Modena ad Reggio Emilia, Modena, Italy, postcode 41100.

Name of Journal: World Journal of Clinical Cases

ESPS Manuscript NO: 14765

The manuscript has been improved according to the suggestions of Reviewers and Editor:

1. Format has been updated

2. Revision has been made according to the suggestions of the reviewers. Modified parts of the manuscript have been underlined.

Reviewer 01204088
"Since this is an invited editorial, I only have one comment. ECG tracing on the Figure 2A will be appreciated, since the relation between ECG (AV delay) and Doppler recording will be the most important message of this editorial comment". Done

Reviewer 00060492
"This phenomenon has been know for a long time (see: Circulation. 1999; 99: e13). The nice new twist is that we are now afraid of the adverse effects of RV pacing. **Minor comments**: **1.** Please describe what you mean by an orthostatic stress test. "Orthostatic stress test" is a sudden change from supine to upright position while monitoring blood pressure, heart rate and diastolic filling pattern **2.** Substitute the word supine for clinostatic. Done **3.** Did you try AAI pacing at a fixed rate? Yes we did and the results were the same compared to MVP. **Major comments**: **1**. In the absence of LV dysfunction, diastolic MR due to AV block is usually a benign phenomenon devoid of diagnostic or therapeutic clinical implications. Echocardiography in your patient revealed moderate LV hypertrophy and an ejection

fraction of 50%. It has been suggested that patients with left ventricular disease, especially hypertrophy of any cause, are more sensitive to the correct timing of atrial systole. Was there evidence of diastolic dysfunction pre-pacemaker? Diastolic pattern (pulsed wave mitral Doppler) showed abnormal relaxation with an adequate filling time in sinus rhythm **2.** Pacemaker syndrome occurs when there is atrial systole during ventricular systole see [Br Heart J. Aug 1992; 68(2): 163–166]. E/A fusion is a diastolic filling issue. Characterizing it as "a kind of 'pacemaker syndrome'" (on page 4 of the manuscript) is misleading. It is reasonable to acknowledge that the orthostatic exacerbation is similar. We have addressed this issue in the manuscript according to your suggestions. **3.** It would be helpful to comment on how diastolic filling (including postural influences) contributes to cardiac output. This is implied, but not specifically commented on." We have addressed this issue in the manuscript according to your suggestions.

Thank you again for publishing our manuscript in the *WJCC*

Sincerely yours,

Elia De Maria
Arrhythmology Cath Lab
Cardiology Unit
Ramazzini Hospital
Via Molinari 1, 41012, Carpi (Modena), Italy.

E-mail: e.demaria@inwind.it