

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 21069

Title: Impact of computed tomography image and contact force technology on catheter ablation for atrial fibrillation

Reviewer's code: 00227355

Reviewer's country: Japan

Science editor: Yue-Li Tian

Date sent for review: 2015-06-29 19:03

Date reviewed: 2015-07-12 11:14

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input checked="" type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input checked="" type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

This is an interesting paper for the clinical practice. Ibrahim Marai et al. reported that CT integration and contact force technology may reduce the recurrence of atrial tachyarrhythmia after catheter ablation for AF. Overall the paper appears to be carefully examined and data adequately discussed. I suggest that this paper has the priority to be published in WJC. I have a few comments to make. 1) Do you have a group including some patients who underwent AF ablation with contact force technology in the EAM group? 2) How about the mean AF duration in the EAM group and CT group?

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 21069

Title: Impact of computed tomography image and contact force technology on catheter ablation for atrial fibrillation

Reviewer's code: 00214291

Reviewer's country: Germany

Science editor: Yue-Li Tian

Date sent for review: 2015-06-29 19:03

Date reviewed: 2015-07-10 00:54

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

This is an interesting article analysing the influence of novel technologies (image integration and contact force evaluation) on the outcome of catheter ablation of atrial fibrillation. However, the number of patients enrolled in the study is rather low. The authors should present data about the adjunctive antiarrhythmic medication. Furthermore, they should provide the number of patients with recurrences of atrial fibrillation and atrial tachycardia / or atrial flutter in detail.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 21069

Title: Impact of computed tomography image and contact force technology on catheter ablation for atrial fibrillation

Reviewer's code: 00503536

Reviewer's country: Japan

Science editor: Yue-Li Tian

Date sent for review: 2015-06-29 19:03

Date reviewed: 2015-07-11 08:56

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input type="checkbox"/> Grade C: Good		<input type="checkbox"/> Duplicate publication	
<input checked="" type="checkbox"/> Grade D: Fair	<input checked="" type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Plagiarism	<input checked="" type="checkbox"/> Rejection
<input type="checkbox"/> Grade E: Poor	<input type="checkbox"/> Grade D: Rejected	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Minor revision
		BPG Search:	<input type="checkbox"/> Major revision
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

The manuscript written by Marai et al. describes the useful therapeutic option for atrial tachyarrhythmia using the combination of CT imaging and contact force technology with electroanatomical mapping. The data show that the combination technology significantly reduce the recurrence of atrial tachyarrhythmia. The data are interesting but the study is not a randomized one with small numbers of patients. There are some more concerns that need to be addressed. Major points 1. The mechanism why the novel combination therapy is more useful for reducing the recurrence of atrial tachyarrhythmia is not clear. 2. Adverse events or important technological points for the novel therapy should be mentioned. Minor points 1. Selection criteria and their backgrounds need to be described in more detail in the Materials and Methods section. 2. Discussion should be more focused. 3. There are many grammatical errors.

ESPS PEER-REVIEW REPORT

Name of journal: World Journal of Cardiology

ESPS manuscript NO: 21069

Title: Impact of computed tomography image and contact force technology on catheter ablation for atrial fibrillation

Reviewer's code: 00225356

Reviewer's country: Italy

Science editor: Yue-Li Tian

Date sent for review: 2015-06-29 19:03

Date reviewed: 2015-07-15 02:51

CLASSIFICATION	LANGUAGE EVALUATION	SCIENTIFIC MISCONDUCT	CONCLUSION
<input type="checkbox"/> Grade A: Excellent	<input type="checkbox"/> Grade A: Priority publishing	Google Search:	<input type="checkbox"/> Accept
<input type="checkbox"/> Grade B: Very good	<input checked="" type="checkbox"/> Grade B: Minor language polishing	<input type="checkbox"/> The same title	<input type="checkbox"/> High priority for publication
<input checked="" type="checkbox"/> Grade C: Good	<input type="checkbox"/> Grade C: A great deal of language polishing	<input type="checkbox"/> Duplicate publication	<input type="checkbox"/> Rejection
<input type="checkbox"/> Grade D: Fair	<input type="checkbox"/> Grade D: Rejected	<input type="checkbox"/> Plagiarism	<input type="checkbox"/> Minor revision
<input type="checkbox"/> Grade E: Poor		<input checked="" type="checkbox"/> No	<input type="checkbox"/> Major revision
		BPG Search:	
		<input type="checkbox"/> The same title	
		<input type="checkbox"/> Duplicate publication	
		<input type="checkbox"/> Plagiarism	
		<input checked="" type="checkbox"/> No	

COMMENTS TO AUTHORS

The paper by dr. Marai et al. reports the results of a small non-randomized study which evaluates the impact of the combination of two new technologies (imaging integration and contact force sensing) on catheter ablation of atrial fibrillation, by comparing its clinical outcome with the one of the same procedure performed without these two technologies. The limitation are obvious, but well acknowledged. The perspective of the study are interesting, although the small sample size limits the importance of the results. There are several parts of the manuscript which require revision and clarification. 1.The design of the study is not very clear (a part of the patients in the CT group still received ablation without contact force sensing). A figure with a flowchart reporting the different patient groups and the results will help in understanding better at first sights the study and its results. 2.It is not clear how many operators where involved in the study and if they were equally distributed in the different groups. This is crucial in this type of ablation, since the results are very much operator-dependent. 3.The authors state that they delivered RF energy only when the contact force was > 10 g, but they did not give the range of the values that they considered optimal for ablation

(10-40 g?). Moreover, in the results, no numeric data are given for contact force, such as mean/median/range of contact force values and stability of contact force (for how much time the contact force was stably within the predetermined range?). The last parameter proved quite important in the Smart-AF trial, since this is not a “plug-and-play” technology that by definition improves the results; the outcome, on the other hand, improves when some criteria are fulfilled. The Smart Touch group in this study is too small for sub-analysis, but the difference between the two groups in term of outcome might become significant when these parameters are considered. 4.The authors should speculate on the role of imaging integration to improve the clinical outcome. Was the procedure outcome better because the lesion set was more proximal and/or precise? 5.Figure 1 should have a second panel showing the lesion set of the procedure in the EAM group. 6.It is not clear how many patients completed the 24 month follow-up in each group: in the Kaplan-Meier estimate both curves become very flat after 12 month, which suggests that there are no events (less likely) or no data (more likely) 7. In table 1, the meaning of the line AADs is not clear. 8.There are several typographic errors throughout the manuscript. For example: medazolam instead of midazolam, gram instead of g, 43 C instead of 43° C.