

Peer Review File

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Reviewer A:

Comment #1: is this just a method paper?

- please provide also the consensus document.

Response: Thank you for the valuable suggestion. We have revised the table 2 and the results of the three-round Delphi surveys have been replenished in the expert consensus voting list. The contents of expert consensus statements are presented in Table 2.

No	Key items	Agreement
1	Acupuncture is recommended as an adjunctive therapy for arrhythmias caused by cardiac diseases (coronary atherosclerotic heart disease, hypertension, cardiomyopathies, etc.).	Yes (90.00%)
2	Acupuncture is recommended as an adjunct therapy for arrhythmia caused by non-cardiogenic internal diseases (respiratory system diseases, and digestive diseases.)	Yes (96.55%)
3	Acupuncture is recommended as an adjunct therapy for arrhythmia caused by lifestyle-related factors (over exercise, excessive emotion, drinking coffee, smoking and drinking, etc.).	Yes (96.67%)
4	For patients with sinus arrhythmia, acupuncture is recommended as an adjunctive therapy to relieve clinical symptoms (palpitations, dyspnea or shortness of breath, chest pain or discomfort, fatigue, and dizziness).	Yes (100%)
5	For patients with sinus arrhythmia, acupuncture is recommended as an adjunctive therapy to regulate the rate or rhythm of heartbeat (such as reducing frequency or duration of arrhythmia attacks, and decreasing the time of restoration to NSR).	Yes (86.67%)
6	For patients with sinus arrhythmia, acupuncture is recommended as an adjunctive therapy to improve the quality of life and mental conditions.	Yes (96.67%)
7	For patients with atrial arrhythmia, acupuncture is recommended as an adjunctive therapy to relieve clinical symptoms (palpitations, dyspnea or shortness of breath, chest pain or discomfort, fatigue, and dizziness).	Yes (90.00%)
8	For patients with atrial arrhythmia, acupuncture is recommended as an adjunctive therapy to regulate the rate or rhythm of heartbeat (such as reducing frequency or duration of arrhythmia attacks, and decreasing the time of restoration to NSR).	Yes (90.00%)
9	For patients with atrial arrhythmia, acupuncture is recommended as an adjunctive therapy to	Yes (93.33%)

	improve the quality of life and mental conditions.	
10	For patients with tachyarrhythmia, acupuncture is recommended to as an adjunctive therapy relieve clinical symptoms (palpitations, dyspnea or shortness of breath, chest pain or discomfort, fatigue, and dizziness).	Yes (96.67%)
11	For patients with tachyarrhythmia, acupuncture is recommended to as an adjunctive therapy regulate the rate or rhythm of heartbeat (such as reducing frequency or duration of arrhythmia attacks, and decreasing the time of restoration to NSR).	Yes (93.33%)
12	For patients with tachyarrhythmia, acupuncture is recommended as an adjunctive therapy to improve the quality of life and mental conditions.	Yes (83.33%)
13	For patients with bradyarrhythmia, acupuncture is recommended as an adjunctive therapy to relieve clinical symptoms (palpitations, dyspnea or shortness of breath, chest pain or discomfort, fatigue, and dizziness).	Yes (100%)
14	For patients with bradyarrhythmia, acupuncture is recommended as an adjunctive therapy to regulate the rate or rhythm of heartbeat (such as reducing frequency or duration of arrhythmia attacks, and decreasing the time of restoration to NSR).	Yes (93.10%)
15	For patients with bradyarrhythmia, acupuncture is recommended as an adjunctive therapy to improve the quality of life and mental conditions.	Yes (93.33%)
16	For patients with atrial fibrillation, acupuncture is recommended as an adjunctive therapy to relieve clinical symptoms (palpitations, dyspnea or shortness of breath, chest pain or discomfort, fatigue, and dizziness).	Yes (93.33%)
17	For patients with atrial fibrillation, acupuncture is recommended as an adjunctive therapy to regulate the rate or rhythm of heartbeat (such as reducing frequency or duration of arrhythmia attacks, and decreasing the time of restoration to NSR).	No (76.67%)
18	For patients with atrial fibrillation, acupuncture is recommended as an adjunctive therapy to improve the quality of life and mental conditions.	Yes (89.66%)
19	For patients who undergone invasive treatment (such as catheter ablation, pacemaker implantation) in arrhythmia, acupuncture is recommended as an adjunctive therapy to reduce the recurrence of arrhythmia.	No (56.67%)
20	For patients who undergone invasive treatment (such as catheter ablation, pacemaker	No (73.33%)

implantation) in arrhythmia, acupuncture is recommended as an adjunctive therapy to reduce the incidence of related cardiovascular events.

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| 21 | For patients who undergone invasive treatment (such as catheter ablation, pacemaker implantation) in arrhythmia, acupuncture is recommended as an adjunctive therapy to improve the quality of life and mental conditions. | Yes (90.00%) |
| 22 | The relief of clinical symptoms can be maintained for 1-6 months after acupuncture treatment. | Yes (83.33%) |
| 23 | The traditional Chinese medicine theory of syndrome differentiation and treatment is recommended to be carefully considered in the treatment of arrhythmia, especially for heart-yang stasis deficiency syndrome, qi-yin deficiency syndrome, qi stagnation and blood stasis syndrome, phlegm block syndrome etc. | Yes (86.67%) |
| 24 | It is recommended to select acupoints on <i>Shoujueyin</i> pericardial meridian and <i>Shoushaoyin</i> pericardial meridian. | Yes (96.67%) |
| 25 | The selection of acupoints is an important factor affecting the effectiveness of acupuncture. It is recommended to focus on the application of specific acupoints. The recommended specific acupoints are: <i>Neiguan</i> , <i>Xinshu</i> , <i>Danzhong</i> and <i>Shenmen</i> . | Yes (96.67%) |
| 26 | The recommended types of specific acupoints are: <i>Beishu</i> acupoint and <i>Yuan</i> acupoint. | Yes (83.33%) |
| 27 | The recommended specific acupoints combinations are: <i>Yuan - Luo</i> combination, and <i>Beishu - Mu</i> combination. | Yes (90.00%) |
| 28 | The recommended acupuncture manipulation is the even reinforcing-reducing method. | Yes (82.76%) |
| 29 | The recommended number of acupoints is 3-5 for each treatment. | Yes (90.00%) |
| 30 | The commended duration of needle retention is 30min for each treatment. | Yes (96.67%) |
| 31 | The commended acupuncture frequency is 3 sessions per week. | Yes (86.67%) |
| 32 | The recommend acupuncture course is 4 weeks. | Yes (83.33%) |
| 33 | <i>Deqi</i> is an impartment factor for the achievement of therapeutic effect. | Yes (90.00%) |
| 34 | Adverse events are uncommon in the acupuncture treatment of arrhythmia. Possible adverse events include subcutaneous hematoma and abnormal post-acupuncture sensation (such as pain, numbness). | Yes (90.00%) |
| 35 | It is recommended that acupuncture practitioners should hold the license of TCM and at least 3 years of experience in acupuncture. | Yes (93.33%) |
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Reviewer B:

This is a well designed and executed Delphi consensus review of acupuncture for the arrhythmias. Unfortunately, it is spoiled by a poorly presented introduction. I suspect that the problem is mainly in the translation, but the first paragraph in particular gives the erroneous (I'm sure) impression that the authors do not understand the concept of arrhythmia. Indeed, the first sentence is an unfortunate misquotation of reference 1. Arrhythmia is not a single disease. As ref 1 states: "Arrhythmias represent a family of cardiac conditions characterized by irregularities in the rate or rhythm of heartbeats". There is also (refs 3+4) confusing mention of Sudden Cardiac Death, for which of course acupuncture is totally inappropriate.

1. All this gives a false impression, since the consensus statements have been very suitably formulated to differentiate between the various groups of common arrhythmias. I suggest, therefore that the introduction is re-written with more relevant references and with greater care in translation.

Response: We are grateful to you for pointing out our translation problems patiently. We are sorry for the unclear description. The introduction has been corrected in the revised manuscript (page 4 line 2-14): *"Cardiac arrhythmia (CA) is a family of cardiac conditions characterized by irregular rate or rhythm of heartbeats¹. There are many types of CA with various manifestations and hazards, such as sinus/atrial/ventricular arrhythmia, or tachyarrhythmia/bradyarrhythmia (1,2). The overall prevalence of CA is about 3.4% (3), and approximate 3.7 million populations die of CA annually worldwide (4). There are many important factors that increase the risk of CA, such as aging, heredity, alcohol and tobacco use, physical inactivity, and obesity (5-11). In the context of aging society, the higher prevalence of CA is bringing a growing challenge to the global health-care system. It is urgent and of great significance to manage CA effectively, since CA is regarded as the leading cause of morbidity and mortality (12)."*

2. Results of literature review: 4 eligible reviews – please give the 4 references here.

Response: We are grateful for your valuable suggestion. We have added 4 references in the revised manuscript. (page 10 line 14)

3. Discussion, 2nd paragraph: Acupuncture is recommended for regulation of rate or rhythm. I note from figures 2, 3 and 4 that while consensus was agreed in the first round that acupuncture is recommended to relieve symptoms and improve QOL for all types of arrhythmia except AF, it was not until the third round that consensus was agreed on improvement of rate and rhythm (apart from the non-pathological sinus-arrhythmia). This suggests that the experts were initially doubtful that acupuncture could influence an objective arrhythmia parameter, and that those doubts remained concerning AF. This level of reluctance should be mentioned in the Discussion.

Response: We appreciate and agree with your insightful and kind suggestions. According to your suggestions, this discussion have been added in the revised manuscript as follows: *"It is worth noting that experts agreed that acupuncture can improve the quality of life and clinical symptoms for all types of arrhythmia except AF in the first round, while it was not until the third round that consensus was agreed on improvement of rate and rhythm. This suggests that experts initially had doubts whether acupuncture could improve the objective arrhythmia parameters. Due to the low quality of current evidence, a robust conclusion cannot be drawn. Therefore, experts were more cautious when interpreted the results. In addition, acupuncturists know that acupuncture could improve the clinical symptoms such as palpitations and chest discomfort by communication with patients. However, due to the lack of relatively professional examinations (electrocardiogram, etc.) in the acupuncture clinics, experts are*

uncertain about whether acupuncture can influence the objective arrhythmia parameters. This may be the main reason for the hesitation of experts.” (page 12 line 21-22 and page 13 line 1-10)

Reviewer C:

This study is a Delphi expert consensus survey on the effectiveness of acupuncture in patients with arrhythmia.

As mentioned in the limitations, there are aspects that the panel is composed only of experts in China and the recommendations for acupuncture treatment are too simplistic.

However, the research methodology was well-designed and the authors provided the basis for developing consensus-based recommendations for clinical guidelines for acupuncture treatment of arrhythmia.

Response: We are grateful for the comment.