

List of Responses

Dear Editors and Reviewers:

Thank you for your letter and for the reviewers' comments concerning our manuscript. Those comments are all valuable and very helpful for revising and improving our paper, as well as the important guiding significance to our researches. We have studied comments carefully and have made correction which we hope meet with approval. The main corrections in the paper and the responds to the reviewer's comments are as flowing:

Responds to the reviewer's comments:

Reviewer #1:

Thank you for your eight valuable comments and we will respond to each of them below.

1. Discuss what symptoms brought the patient to hospital

This is a question of great clinical value that deserves to be explored. As your suggestion, we have added this in the section of "History of present illness". "For 3 years ago, the patient had palpitations and shortness of breath during intermittent activities such as fast walking and uphill, which could be relieved by rest. On July 14, 2022, the patient felt dizzy and palpitation. The dynamic electrocardiogram showed paroxysmal atrial fibrillation, so he came to our hospital for diagnosis and treatment".

2. Mention patient resting HR and Afib HR

This is a very good question. Resting HR and Afib HR are key evaluation indicators for an AF patient. According to the results of cardiac monitoring during the patient's hospitalization, the patient has a resting HR of 65-75 bpm and Afib HR of 80-100 bpm.

3. Was patient in SR? If not mention Variable heart sounds and tachycardia in physical exam. Mention BMI, BP in physical exam

Admission physical examination suggests that the patient is in SR, 70bpm. As your suggestion, we have added BMI, BP in physical exam section. "The blood pressure was 136/72mmHg, the respiratory rate 18 beats per minute, the pulse 70 beats per minute, and the temperature 36.4, and MBI 25.7"

4. Mention LVEF, Chamber enlargement, pulmonary veins and LAVI details. Mention no diastolic dysfunction

Thank you for your kind reminder. We have added this in the section of "Imaging examinations". "Echocardiography showed normal cardiac morphology and structure, mild valvular regurgitation, normal left ventricular systolic function, and reduced diastolic function

CT scan of the left atrial and pulmonary vein showed enlargement of the left atrium without abnormal density in the left atrial appendage cavity"

5. Explain how did the foreign body got there in the first place?

This question is at the heart of the case. To be sure, this foreign body came from the coating of the guidewire surface. It was considered that the mismatch between the traditional metal puncture needle and the new guide wire used at that time might be related. When the ordinary metal puncture needle and the guide wire were at an Angle in the blood vessel and the blood return was not smooth and needed to be withdrawn, the surgeon chose to withdraw the guide wire first, so that the tip of the needle cut off the plastic coating on the surface of the guide wire, resulting in foreign body (Figure 2 B-D, Video).With the blood flow through the venous system, it gradually entered the right atrium and right ventricle, and then flowed into the pulmonary artery. We've

reworked this section to clearly show the process in the section of "Discussion".

6. Why was the patient not on Antiplatelet/ DOAC. Write CHADVAS score

The patient CHADVAS score is 1 for hypertension. The patient was not taking DOAC for a long time prior to hospitalization, but we gave anticoagulation both during hospitalization and prior to operation as recommended by the guidelines.

7. In discussion add more content and citations

Thank you for your honest advice. Indeed, we need more content and literature to illustrate what we have in this case. We have adjusted accordingly and hope you can continue to give us your valuable comments.

8. Needs extensive revision and English editing and case formatting

We have carefully revised our manuscript in accord with the constructive criticisms received. We are confident that it is now stronger because of the review process and we thank the Editor and all the reviewers for their insightful feedback.

Reviewer #2:

Thank you for your valuable comments and recognition of our paper. Thank you for your review of our paper. These four suggestions are very valuable and worth discussing, and I will respond to each of them below.

1. The abstract is poor and does not reflect the case. Many readers will only

read the abstract and others will read the rest of the case report depending on whether they find the abstract interesting.

Thank you for your kind and very valuable advice. The importance of the abstract section for a paper cannot be overstated. After listening to your suggestions, we carefully reworked the abstract section. Now, we focused on how complications occur, especially in the beginning. We are confident that this problem has now been greatly improved as a result of your suggestions.

2. In the case presentation, all the headings (Chief complaints, History of past illness, etc) should be linked together in a one or two paragraph narrative.

After making the changes you suggested, we found that the language of the paper became more fluent. Thank you for such a good suggestion to make our paper more readable.

3. Between that point and TREATMENT, there should be a description of the steps taken and at what point the complication may have occurred. This should be the longest part of the manuscript, as it is the part that adds novelty. The removal of a foreign body with a snare is not uncommon in Cath Lab activity.

Your profound insights have helped me organize our thoughts. Thank you for such insightful advice! We've shifted the focus of the paper to how this complication occurs, especially at what point the complication occurred. We hope that our modifications will meet your requirements and receive further guidance from you.

4. The novelty and interest of the case is that it is, to my knowledge, the first occurrence of a foreign body in an electroporation ablation. This technique is being presented as almost free of complications, when this is not the case. The

description on how the complication could have occurred is the basis of the case. The treatment, being important (and being the most documented by the authors with their video), is not the main aspect of the case.

Thank you for recognizing the novelty and interest of our case. We couldn't agree with you more that electroporation ablation is not absolutely safe. As you said, how the complication could have occurred should be the core of the case. We've realized this and have carefully revised the entire paper. We are confident that our paper now clearly shows how the complication occurred because of the review process. We thank the Editor and all the reviewers for their insightful feedback.

Round 2

B) General comments for the authors R et al have extensively modified the submitted manuscript. The revised version has been greatly improved and highlights the importance of the reported case, the dissemination of which is important as it is very easy to be repeated and should be taken into account, especially in less experienced operators. I have described only minor modifications to improve the style, and in my opinion it is now ready for publication in World Journal of Clinical Cases. C) Specific comments for the authors 1. Abstract.- 1) "Iatrogenic" should be changed to interventional. 2) CASE SUMMARY: -Move this part of the Background to Case Summary: "We describe a case in which a linear foreign body suddenly appeared on imaging during pulsed ablation of atrial fibrillation. Multiposition angiography showed that the foreign body was currently lodged in the pulmonary artery but was hemodynamically stable. We then chose to use an interventional approach to remove the foreign body from the pulmonary artery. This foreign body was subsequently confirmed to be from the hydrophilic coating of the guidewire surface. This may be related to the difficulties encountered during the puncture of the femoral vein. This is a rare, and serious complication of femoral vein puncture". -In this paragraph, . "on imaging" should be changed to "fluoroscopy" (or similar). . " This is a rare, and serious" to "This is a rare, but serious". 3) BACKGROUND .I would suggest to modify in this sense: "Foreign bodies in the pulmonary circulation have been documented in the literature, mostly caused by interventional procedures. However, reports of pulmonary

artery foreign bodies during femoral vein puncture are rare and there is no description of such complication from the guidewire surface flows into the pulmonary artery during a pulse ablation in a patient with atrial fibrillation".

2) Introduction.- 1) "Therefore, we report this case in order to avoid a similar situation." should be changed to something as "Therefore, careful manipulation of guidewire is essential to prevent a similar situation". 3) Treatment.- 1) Suppress the part of anesthetic, as it is non-relevant. 2) It would be convenient to describe the first puncture and its the material employed. 3) In the sentence: "...However, when we started to ablate the right inferior pulmonary vein, a strange phenomenon appeared. X-ray showed a linear foreign body...", delete ", a strange phenomenon appeared". CONCLUSION 1) I would advise adding: "... (and not so beginners)" 2) I would recommend ending with the same sentence as the abstract: ".....Mismatches between interventional devices from different manufacturers used for femoral venipuncture may result in pulmonary artery foreign bodies.

Scientific Quality: Grade B (Very good)

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