Dear Editor,

I am very grateful for your comments for our manuscript. we have revised the relevant part in manuscript according with your advice. Some comments were replied below.

1. **In line 63, what does lower limb fatigue means? I think here we have to mention the condition not the symptom.**

   R: We have revised the term 'lower limb fatigue' to ' lower limb arterial embolism ' in the revised manuscript.

2. **Regarding the treatment- please specify the angiography findings. Was the total occlusion was acute or chronic? Was it because of thrombus or chronic due to plaque? Post stent was there any remaining thrombus?**

   R: We revised the part as follows: Emergent coronary angiography (CAG) revealed an acute total occlusion at the proximal segment of right coronary artery (RCA) (Figure 1A), with normal blood flow of the left coronary artery (Figure 1B). After opening the RCA with balloon angioplasty, the repeat angiography revealed a smooth vascular wall without evidence of atherosclerotic plaque (Figure 1C) but the thrombus shattered and moved into the distal of the RCA (Figure 1C). Hence, we considered that the total occlusion of the RCA is caused by acute thromboembolism rather than chronic due to plaque. We did not perform stenting implantation due to the abtained TIMI 3 blood flow. After two months of guideline based medication therapy (GBMT), a repeat CAG showed successful resolution of the thrombus in the distal region of the RCA (Figure 1D).

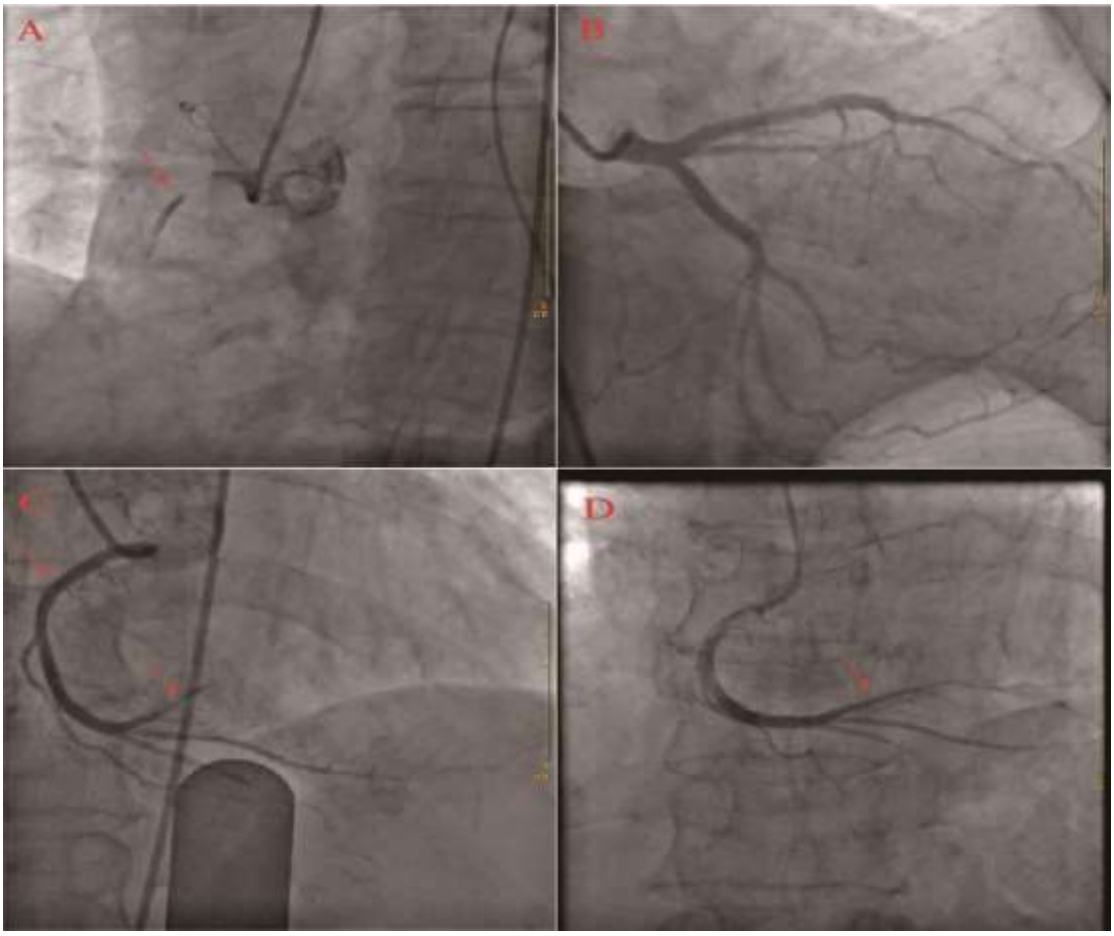

Figure 1. Coronary angiography (CAG). A: Emergent CAG revealed a total occlusion in the proximal segment of the RCA. B: CAG revealed no significant atherosclerotic lesions in the left main (LM), left anterior descending (LAD) and left circumflex (LCX). C: After PCI, repeat angiography revealed the result of TIMI 3 blood flow in RCA. Thrombus were observed in the first posterior descending artery (PDA) and posterior lateral artery (PLA). D: Two months after PCI, CAG showed TIMI 3 blood flow in the distal region of the RCA without signs of thrombus.

3. **In line 152- cause of paradoxical embolism- acute pulmonary embolism with cor-pulmonale or right sided strain will be more appropriate.**

   R: Thank you for your suggestion and we have revised 'acute pulmonary embolism' to 'acute pulmonary embolism with cor-pulmonale or right-sided strain' in the revised manuscript.

4. **Please elaborate the history of present illness.**

R: Thank you for your suggestion. We have added and revised his medical history as follows: Six days ago, the patient had a central venous catheter (CVC) implanted for a lumbar disc operation. 6 h before admission, the patient experienced sudden chest pain during the rehabilitation training without shortness of breath or palpitations.

We would like to express our gratitude for granting us the opportunity to submit a revised version of the manuscript. We sincerely appreciate your time and consideration.

If you have any questions, please do not hesitate to contact us.

Thank you very much for all your help and looking forward to hearing from you soon.

Best regards

Sincerely yours

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