

Response to the issues raised in the peer review report:

1. Many of these cases are reported in the literature. Please describe what is novel in this case. Thrombus trapped in a PFO mainly occurred in old patients with thrombophilia. A systematic review showed that the mean age of patients with trapped thrombus in PFO is 59.3 ± 16.4 years. The patient we reported was 32-year-old, and there was no predisposing factor for thromboembolism except the sedentary lifestyle. The case highlights the sedentary lifestyle may be a risk factor of thromboembolism in young adults. Furthermore, thrombi were detected in deep vein of lower extremity, bilateral pulmonary arteries and cardiac chambers simultaneously. It was a rare scenario which provided a direct evidence of paradoxical embolism.

2. Did you recommend what exercise program and lifestyle for the patient? The recommendation for exercise is aerobic physical activity, such as jogging or swimming, five sessions per week, lasting on average 30 minutes /session, and involving moderate-to-vigorous intensity physical activity. Moreover, the patient was told not to stay up late at night and maintain a good mentality.