

Review Form 1.7

Journal Name:	Asian Journal of Case Reports in Medicine and Health
Manuscript Number:	Ms_AJCRMH_118692
Title of the Manuscript:	Thromboembolic events and metabolic Hyperhomocysteinemia: Unraveling the links and clinical implications
Type of the Article	Case report

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalajcrmh.com/index.php/AJCRMH/editorial-policy>)

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>The research question is an important one and is appropriate to research to the research community. The manuscript is clearly laid out with relevance to the introduction, methodology, results and conclusion sections. The authors research builds on previous research and does reference the research work properly.</p> <p>YES</p> <p>YES</p> <p>YES</p> <p>YES</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>YES</p>	
<p>Optional/General comments</p>	<p>The authors assess the relationship between thromboembolic events and hyperhomocysteinemia in a 20 year old man. The patient was admitted for a pulmonary embolism and was diagnosed with hyperhomocysteinemia and the authors discuss the pathophysiology, clinical implications and management strategies. The authors report that hyperhomocysteinemia was possibly responsible for the thrombo-embolic event and an unknown “decompensating” factor may also be present potentiating a latent thrombogenic risk. The authors conclude that further research is required to assess the role of hyperhomocysteinemia in thrombosis and develop personalized therapeutic strategies to mitigate thrombotic risk in affected individuals.</p> <p>Comment: The authors may assess the role of the anti-aging gene Sirtuin 1 in this patient with hyperhomocysteinemia. Sirtuin 1 is critical for the prevention of various chronic disease such as diabetes and neurodegenerative diseases. Homocysteine has been shown to reduce Sirtuin 1 and Sirtuin 1 activators in nutritional diet may need to be consumed in this patient. The role of Sirtuin 1 inhibitors should be researched in this patient and reduced to activate Sirtuin 1 and prevent thrombosis.</p> <p>RELEVANT REFERENCES:</p> <ol style="list-style-type: none"> 1. Anti-Aging Genes Improve Appetite Regulation and Reverse Cell Senescence and Apoptosis in Global Populations. <i>Advances in Aging Research</i>, 2016, 5, 9-26. 2. Single Gene Inactivation with Implications to Diabetes and Multiple Organ Dysfunction Syndrome. <i>J Clin Epigenet.</i> 2017;Vol. 3 No. 3:24. 3. Nutrition Therapy Regulates Caffeine Metabolism with Relevance to NAFLD and Induction of Type 3 Diabetes. <i>J Diabetes Metab Disord.</i> 2017; 4: 019. 4. Sirtuin 1, a Diagnostic Protein Marker and its Relevance to Chronic Disease and Therapeutic Drug Interventions”. <i>EC Pharmacology and Toxicology</i> 6.4 (2018): 209-215. 5. Ching-Hou Ma, Yen Chun Chiu, Chin-Hsien Wu, I.-Ming Jou, Yuan-Kun Tu, Ching-Hsia 	

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	<p>Hung, Pei-Ling Hsieh, Kun-Ling Tsai. Homocysteine causes dysfunction of chondrocytes and oxidative stress through repression of SIRT1/AMPK pathway: A possible link between hyperhomocysteinemia and osteoarthritis, Redox Biology, Volume 15, 2018, Pages 504-512,</p> <p>6. Shih-Hung Chan, Ching-Hsia Hung, Jhih-Yuan Shih, Pei-Ming Chu, Yung-Hsin Cheng, Huei-Chen Lin, Pei-Ling Hsieh, Kun-Ling Tsai,</p> <p>7. Exercise intervention attenuates hyperhomocysteinemia-induced aortic endothelial oxidative injury by regulating SIRT1 through mitigating NADPH oxidase/LOX-1 signaling, Redox Biology, Volume 14, 2018, Pages 116-125,</p> <p>8. Bettiol A, Urban ML, Emmi G, Galora S, Argento FR, Fini E, Borghi S, Bagni G, Mattioli I, Prisco D, Fiorillo C and Becatti M (2024) SIRT1 and thrombosis. Front. Mol. Biosci. 10:1325002.</p>	
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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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