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Journal Name:	**British Journal of Medicine and Medical Research**
Manuscript Number:	**Ms_BJMMR_20784**
Title of the Manuscript:	**A pilot, randomized sham control trial of autologous bone marrow stem cells in acute ischemic central retinal vein occlusion (sic study)**
Type of the Article	**Original article**

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.
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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)*
Compulsory REVISION comments	Methods and results need a major and compulsory revision, as both sections lack a lot of details that make it impossible for others to benefit from this work , please find the following details: 1) It is a little bit confusing when reading the methodology to know which type of cells has the authors used in there study. In line 79 : "Bone marrow stem cells were separated… ", should be changed to bone marrow mononuclear cells layer ,as yet at this stage stem cells are not separated (cleared in the following comments). 2) In line 80 ; "Stem cells were layered ….. ", actually it's the bone marrow sample that should be layered over the lymphocyte separation medium for the separation of the mononuclear cells layer that includes lymphocytes , monocytes and a heterogeneous population of stem cells 3) In line 83; "The harvested stem cells …. ", the harvested cells are the mononuclear cells and not the stem cells only , as stem cells are never separated using this physical method of separation but instead they can be separated using immunological methods or plastic adherence for the mesenchymal stem cells populations	

	4) In line 84; authors mentioned that they evaluated the CD34+ count, please explain how this count was done , as for the CD34+ hematopoietic stem cells to be counted they have to be first isolated immunologically by using the antiCD34 monoclonal antibody by MACS or FACS technique .Authors didn't mention to use any of these techniques and thus it is confusing whether they used the MNC layer or the purified CD34+ stem cells subpopulation??? 5) Authors mentioned that they evaluated the cells viability, count , morphology and purity using the Giemsa stain , the results of these evaluations for both cases, should be mentioned in the results of the study with figures if possible . 6) In the results section, although the work was conducted in a very small number of patients, results were not thoroughly shown. For example, you mentioned in the methodology that ocular examination to the patients include the visual acuity, IOP, neovascularization, perfusion and central macular thickness, thus the results of such examination pre and post injection, at the follow-up intervals you mentioned, should be thoroughly presented in your results. So as long as there can't be any statistical analysis for your results due to the insufficient number of cases , at least comprehensive explanation of the ocular examinations done should be added to your manuscript. 7) In case 2 , authors described some of the results after 6	

	month. The results should be shown after 12 month as in the first case and all examination results should be added in both cases in all follow up intervals. 8) Authors mentioned in line 88 that the cells were mixed with triamcinolone acetonide . It is an anti inflammatory and an anti VEGF , thus although added in a very small dose but still can act as a confounding factor??? How can authors offend this? 9) In line 89, authors said that the dose of triamcinolone acetonide given was to counter the possible immunogenic reaction in vitreous cavity. Cells were autologous together with very weak immune factors present in vitreous, the use of such drug seems to be unnecessary but instead it acted as a confounding factor to your results as mentioned in the pervious comment. 10) The degree of ischemia must be added to your results 11) In case 1, Please explain why this patient was still eligible for the study after you found the epi macular membrane. According to my knowledge ,this membrane may hinder from the resolution of the macular edema	

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Minor REVISION comments	1) In line 85, "….. stem cell isolation" , so if authors worked with the MNCs it should be addressed as MNCs in the manuscript and not stem cells , and if they used the CD34+ subpopulation it should be mentioned as such. I am almost sure that you injected MNCs as the number of cells you injected can never be obtained from primary culture(2hrs from isolation) if it is a purified stem cells subpopulation like CD34+ cells 2) Authors have used many abbreviations through the manuscript and didn't mention its full text in the first time it was mentioned. Please revise the manuscript and correct accordingly 3) A figure for case 2 should be included in the manuscript as case 1 4) The (sic study) written in the title has no significant meaning so I think it is better to be deleted **Ethical issues:** In Case 3, the patient's macular thickness was 1151µ , and was left as such till he suffered from ocular pain after 4 weeks . How ethical is to leave such patient without intervention to conduct the study?	

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Optional/General comments	Improvement of the grammar is required	

Reviewer Details:

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