

Review of: "Comparing the Effectiveness of Aloe Vera Gel and 2% Chlorhexidine Gluconate Solution in Preventing Phlebitis Caused by Peripheral Vein Catheters in Hospitalized Patients"

Reyhaneh Naseri¹

¹ Shiraz University of Medical Sciences, Iran, Islamic Republic of

Potential competing interests: No potential competing interests to declare.

Thank you for giving me the opportunity to review this publication. I have provided my comments as follows.

Comments

=====

This is an interesting manuscript exploring differences between the effectiveness of aloe vera gel and 2% chlorhexidine gluconate solution in preventing phlebitis caused by peripheral vein catheters in hospitalized patients. However, the paper could benefit from some major revisions in order to reach publishable quality.

1. Many reviewers prefer to see line numbers and page numbers, so please enable this feature for easier review.
2. Adjust keywords based on MeSH terms in alphabetical order.
3. Overall, the authors should re-review the entire manuscript for grammar (in the abstract, method section line 3, "they got." ?? what exactly does this refer to?, "Information was collected using a demographic information form and a phlebitis checklist" this sentence should be revised.)
4. The abstract section should be revised and should highlight your major points and needs to be improved. The abstract should be approximately 250-300 words. (In the abstract, method section "Data analysis was done with SPSS 25 statistical software at a significance level of 0.05 with chi-square tests and one-way analysis of variance" is unnecessary information to be written in the abstract.)
5. The opening line of each paragraph is introductory and should not include details; rather, it should introduce the main idea which will be supported by the rest of your paragraph, and each paragraph has a main idea. If you begin to transition into a new idea, it belongs in a new paragraph. Therefore, the introduction section paragraphs should be revised.
6. There is some discrepancy between the 2% chlorhexidine gel and 2% chlorhexidine solution—what was actually used? Please uniform this throughout your manuscript.
7. The Method section should be improved to provide more information on how the authors designed the study. The manuscript requires revisions to more clearly describe the patient selection, well-defined inclusion and exclusion criteria, as well as the study method.
8. Generic and brand names of each drug must be mentioned in the Method section.

9. Another concern that may raise bias is whether any individual participants in this research received similar intravenous injections. Were these drugs the same for all the participants?
10. All underlying diseases of all participants should be mentioned.
11. In the Results section, it is indicated that there was no statistically significant difference between the chlorhexidine and aloe vera groups in terms of the frequency of phlebitis. If it is so, I believe that the conclusion is over-exaggerated and misleading. I don't see how using aloe vera is superior to chlorhexidine. Is there an analysis of the cost-effectiveness of using aloe vera gel compared to chlorhexidine? Cost savings for healthcare institutions? I believe that the authors must tone down their interpretation of results and avoid introducing aloe vera as a superior treatment option.
12. Captions of tables should contain definitions.
13. In the limitations paragraph in the Discussion section, it can benefit from adding further methodological limitations. The authors should report some of the limitations of this study in detail.
14. The first paragraph of the Discussion should provide your overall findings and achievements of the study.
15. Some paragraphs have no conclusive sentence.
16. The article can benefit from adding the necessary visuals (screenshots, figures, etc.).
17. The Discussion section can benefit from adding more details about the underlying mechanism and specific components in aloe vera gel that reduces the incidence of phlebitis.