

Dear Editor and Reviewers:

Thank you very much for your time and effort in reviewing our revised manuscript. We have included a point-by-point response to each. Within the revised manuscript, we have used "highlight" to denote significant revisions in response to the Reviewers' comments. We appreciate the excellent suggestions and comments. Following the insight advice, our manuscript has been well improved.

Dear Reviewer 1:

1. What is the clinical significance of this study?

Response: Thank you very much for taking the time to review our manuscript. The clinical significance of this study is that it shares experience in the pharmacological treatment plan. Care of patients who developed herpes virus infection after applying a noninvasive ventilator. There are few domestic and foreign reports on the treatment plan and care related to herpes virus infection after applying a noninvasive ventilator. In this case, the patient's wound healed after applying antiviral drugs, furacilin and thrombin powder topically, antiviral drugs orally, and a wet wound healing concept for a wound dressing change. In this case, no adverse reactions or toxic side effects were found. Therefore, in patients ventilated by a noninvasive ventilator, nursing staff should intervene early when they find abnormal and unusual pain and herpes on the skin of the patient's mouth and lips or other areas. The treatment and care in this

study provide good treatment ideas to effectively accelerate the wound healing process and improve the cure rate of herpes infection. Therefore, for patients who developed herpes virus infection after the application of a noninvasive ventilator, the authors believe that the above-mentioned combined medication method and nursing care measures are worth adopting and applying and are worth studying.

2. What is the primary scientific relationship between Ventilation and development of herpes simplex virus?

Response: The condition of patients who are ventilated with noninvasive ventilators is critical, and herpes virus infection is prone to occur in immunocompromised patients due to primary disease, altered local and systemic defense mechanisms, and the application of hormones and other immunosuppressive agents, which make these patients immunocompromised. This patient in this study had significant herpes-like changes around the mouth and lips two days after the application of noninvasive ventilator ventilation. After consultation with a dermatologist, the specialist examination showed multiple erythematous vesicles around the mouth and clustered blisters on the right neck. A preliminary diagnosis of herpes virus infection was made by the dermatologist after consultation. To confirm this diagnosis, the patient's serum was tested for herpes simplex virus IgM antibodies using an enzyme-linked immunosorbent assay. The patient's serum was positive

for herpes simplex virus IgM antibodies. Therefore, the final diagnosis of the patient was herpes simplex virus infection, based on the results of the investigations mentioned above and serological tests. The possible reason for this was that during the application of noninvasive ventilator ventilation, the mask worn on the patient's mouth and nose area compressed the skin for a long time, affecting blood circulation and making the skin vulnerable to prolonged extrusion and hypoxia, which made the patient susceptible to complications of infection. In addition, the patient had a severe systemic infection, poor self-resistance, hypoalbuminemia, and reduced humoral and cellular immunity, which led to a decrease in lymphocyte transformation response and leukocyte chemotactic response, resulting in the activation of the herpes virus latent in the nerve cells of the body after the previous infection, and therefore the herpes virus infection.

Dear Reviewer 2:

1. Title. Does the title reflect the main subject/hypothesis of the manuscript? The phrase in the title should be polished.

Response: Thanks for the excellent suggestion. We have changed the title according to your comments to “Treatment of large area virus herpes around lips after ventilator.”

2. Abstract. Does the abstract summarize and reflect the work described in the manuscript? Yes.

3. Key Words. Do the key words reflect the focus of the manuscript? Yes. However, the format of key words should be checked, eg. "herpes" instead of "Large area virus herpes".

Response: We have made changes to your comments.

4. Background. Does the manuscript adequately describe the background, present status and significance of the study? Yes.

5. Methods. Does the manuscript describe methods (e.g., experiments, data analysis, surveys, and clinical trials, etc.) in adequate detail? Not applicable.

6. Results. Are the research objectives achieved by the experiments used in this study? What are the contributions that the study has made for research progress in this field? The case report described a woman who had herpes around her lips after noninvasive ventilator usage.

Multimodality treatment was used to cure the skin condition.

7. Discussion. The treatment theories in the discussion part should be cited.

Response: The treatment theories in the discussion part have been cited.

8. 8. Illustrations and tables. Are the figures, diagrams, and tables sufficient, good quality and appropriately illustrative, with labeling of figures using arrows, asterisks, etc, and are the legends adequate and accurately reflective of the images/illustrations shown?

Any high resolution photos of the herpes infection? The eyes should be masked.

Response: Sorry, we didn't take high-resolution pictures of the herpes infection. We will remember to do so next time. The patient's eyes have been masked.

9. Biostatistics. Does the manuscript meet the requirements of biostatistics? Not applicable.

10. Units. Does the manuscript meet the requirements of the use of SI units? Yes.

11. References. Does the manuscript appropriately cite the latest, important and authoritative references in the Introduction and Discussion sections? Does the author self-cite, omit, incorrectly cite and/or over-cite references? No. The references are not cited in the manuscript.

12. Quality of manuscript organization and presentation. Is the manuscript well, concisely and coherently organized and presented? Is the style, language and grammar accurate and appropriate?

Response: Thank you very much for taking the time to review our manuscript. All language problems in the whole manuscript have been carefully revised. Therefore, the language quality of our manuscript has been well improved. The format has been polished.

13. Research methods and reporting. Authors should have prepared their manuscripts according to BPG's standards for manuscript type and the appropriate topically-relevant category, as follows: (1) CARE Checklist (2013) - Case report; (2) CONSORT 2010 Statement - Clinical Trials study, Prospective study, Randomized Controlled trial, Randomized Clinical trial; (3) PRISMA 2009 Checklist - Evidence-Based Medicine, Systematic review, Meta-Analysis; (4) STROBE Statement - Case Control study, Observational study, Retrospective Cohort study; and (5) The ARRIVE Guidelines - Basic study. For (6) Letters to the Editor, the author(s) should have prepared the manuscript according to the appropriate research methods and reporting. Letters to the Editor will be critically evaluated and only letters with new important original or complementary information should be considered for publication. A Letter to the Editor that only recapitulates information published in the article(s) and states that more studies are needed is not acceptable.

According to CARE Checklist: In patient information part, what is the relationship between ventilator and herpes because you mention it in the title, that emphasize the role of ventilator. The timeline is better to be

presented with a figure or table. Diagnostic assessment should be described: how the herpes is diagnosed? viral culture or only clinical diagnosis by a dermatologist?

Response: The relationship between ventilator and herpes is that after the application of noninvasive ventilator ventilation, the mask worn over the patient's mouth and nose area compresses the skin for a long time, which affects blood circulation, and the skin is subjected to prolonged extrusion and hypoxia, making it susceptible to complications of infection. In addition, the patient had a severe systemic infection, poor self-resistance, and hypoalbuminemia, so the skin around the patient's mouth and lips became infected with the herpes virus. Thus it was the application of the trauma ventilator that was secondary to the patient's herpes virus infection.

The diagnosis of herpes simplex virus infection in this patient was established by the combination of the patient's lesions, the dermatologist's examination, and the detection of antibodies to the herpes virus in the patient's serum by enzyme-linked immunosorbent assay (the result was positive).

14. Ethics statements. For all manuscripts involving human studies and/or animal experiments, author(s) must submit the related formal ethics documents that were reviewed and approved by their local ethical review

committee. Did the manuscript meet the requirements of ethics? (1) The informed consent form is not for publication, please check if it fits the journal's publication rule. (2) The eyes in the photograph should be masked if the authors cannot get the patient's consent.

Response: We very agree with the insight suggestion. Informed consent complies with publication rules, and the patient's eyes have been masked.