

## PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 69241

Title: Novel application of Multispectral Refraction Topography in the observation of

myopic control effect by orthokeratology lens in adolescents

Reviewer's code: 06059399

**Position:** Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Japan

Author's Country/Territory: China

Manuscript submission date: 2021-06-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-07-04 23:10

Reviewer performed review: 2021-07-06 01:31

**Review time:** 1 Day and 2 Hours

Scientific quality	[ ] Grade A: Excellent [ ] Grade B: Very good [Y] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	<ul> <li>[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing</li> <li>[ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection</li> </ul>
Conclusion	<ul> <li>[ ] Accept (High priority)</li> <li>[ ] Accept (General priority)</li> <li>[ Y] Minor revision</li> <li>[ ] Major revision</li> <li>[ ] Rejection</li> </ul>
Re-review	[ ]Yes [Y]No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No



## SPECIFIC COMMENTS TO AUTHORS

Manuscript Title: Novel application of Multispectral Refraction Topography in the observation of myopic control effect by orthokeratology lens in adolescents. 1- Title reflected the main subject of the manuscript. 2- The abstract summarized and reflect the described in the manuscript. 3- Key words reflected the focus of the manuscript. 4- The manuscript adequately described the background, presented status and significance of the study. 5- The manuscript described methods (e.g., Study design, Setting and participants, Methods and Statistical methods, etc.) in adequate detail. 6- The research objectives are achieved by the experiments used in this study. Authors explored the mechanism of the RGP. 7- The manuscript interpreted the findings adequately and appropriately, highlighting the key points concisely, clearly and logically. The study is the first to apply corneal topography technology to research the inhibition of patients' myopia growth by orthokeratology. By comparing the increases in refractive power of patients, the increase in the myopia of patients treated with different myopia treatment methods can be quantified. 8- Manuscript included 2 Tables and 6 Figures, which is sufficient and good quality. 9- The manuscript cited appropriately the latest, important and authoritative references in the introduction and discussion sections. 10- The manuscript is well, concisely and coherently organized and presented and the style is accurate and appropriated. Thank you for giving opportunity to review your study.



## PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 69241

**Title:** Novel application of Multispectral Refraction Topography in the observation of myopic control effect by orthokeratology lens in adolescents

myopic control effect by orthokeratology lens in ac

Reviewer's code: 06059397

**Position:** Peer Reviewer

Academic degree: MD

Professional title: Doctor

Reviewer's Country/Territory: Germany

Author's Country/Territory: China

Manuscript submission date: 2021-06-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-07-04 23:09

Reviewer performed review: 2021-07-06 01:32

**Review time:** 1 Day and 2 Hours

Scientific quality	[ ] Grade A: Excellent [Y] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish
Language quality	<ul> <li>[ ] Grade A: Priority publishing [Y] Grade B: Minor language polishing</li> <li>[ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection</li> </ul>
Conclusion	<ul> <li>[ ] Accept (High priority)</li> <li>[ ] Accept (General priority)</li> <li>[ Y] Minor revision</li> <li>[ ] Major revision</li> <li>[ ] Rejection</li> </ul>
Re-review	[Y]Yes []No
Peer-reviewer statements	Peer-Review: [Y] Anonymous [] Onymous Conflicts-of-Interest: [] Yes [Y] No



## SPECIFIC COMMENTS TO AUTHORS

With the popularity of electronic products, the incidence of myopia remains high in adolescents. Rapidly progressing myopia can seriously affect the physical and mental health of children. Thus, this problem needs close attention. The authors of this study explored the mechanism of the RGP, compared the clinical effects of RGP and frame glasses against the increase of diopter in adolescent myopia. Changes in diopter and axial length were collected among 70 adolescent myopia patients (124 eyes) wearing orthokeratology for 1 year and 59 adolescent myopia patients (113 eyes) wearing frame glasses. They analyzed the mechanism of orthokeratology lens on slowing down the increase of myopic diopter by delaying the increase of ocular axis length and reducing the near hyperopia defocus. This topic is actual and well described. The manuscript is well written and very interesting, and authors presented also the limitations of the study. They concluded that amount of retinal defocus can be accurately reproduced with MRT. The orthokeratology lens reduces the amount of peripheral retinal hyperopic defocus to delay the progression of myopia. I have only a minor point to discuss. Is it possible to revise the description of all conclusions? In my opinion, it needs to be targeted, more concise and clearer. I recommend that the manuscript can be published after polishing the English. Sincerely