

Viscosity effects of polyvinyl siloxane impression materials on the accuracy of the stone die produced

Warren Ho, Liang Lin Seow, Ammar Musawi

corresponding author:

Ammar Musawi, Missouri School of Dentistry and Oral Health, A. T. Still University, Kirksville, Missouri, United States

Handling editor:

Michal Heger

Department of Experimental Surgery, Academic Medical Center, University of Amsterdam, Amsterdam, the Netherlands

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Journal of Clinical and Translational Research

Dear author(s),

Reviewers have submitted their critical appraisal of your paper. The reviewers' comments are appended below. Based on their comments and evaluation by the editorial board, your work was FOUND SUITABLE FOR PUBLICATION AFTER MINOR REVISION.

If you decide to revise the work, please itemize the reviewers' comments and provide a point-by-point response to every comment. An exemplary rebuttal letter can be found on at <http://www.jctres.com/en/author-guidelines/> under "Manuscript preparation." Also, please use the track changes function in the original document so that the reviewers can easily verify your responses.

Your revision is due by Jan 04, 2018.

To submit a revision, go to <http://jctres.edmgr.com/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely,

Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #3: A research report on the viscosity of polyvinyl siloxane (PVS) impression materials and their effects on impression accuracy on a prepared stone die is presented by the authors. A regular (monophase), light body with regular body, light body and heavy body, and light body with putty were compared. The authors conclude that impressions taken with a light body and putty produces a die with increased inter-abutment distance. Occlusogingival length was accurate for all applied combinations of PVS viscosity materials, and that a light body with a more viscous PVS impression material produced an accurate shoulder width. The authors recommend considering applications of different PVS combinations to fit the purpose for their use, for example when taking impressions for bridge work or crown work respectively. In general, the manuscript is well written, there are a few minor recommendations that will help improve the overall quality of the report.

ABSTRACT

The abstract should be prepared in a standardized format to include a conclusions section at the end and not significance. After the conclusions section the authors can provide a Clinical significance section that highlights the relevant outcomes and how they could apply to routine clinical practice. In its current form, it is not easy to obtain the conclusions from the study at a glance.

INTRODUCTION

Please revise statement on page 1, lines 18-24: "Synthetic elastomeric impression was first introduced in the late 1950s and became popular because it the poor dimensional stability and inadequate tear resistance..." This statement reads poorly and is confusing.
On page 2, lines 46-51: "Hung et al...", a period should be added at the end of "et al.", "that" should be inserted between "technique" and "had" (i.e. technique that had).
On page 3, lines 7-9: "; therefore, it gets displaces. This...", it should read, "; therefore, it gets displaced, this..."

MATERIALS & METHODS

On page 4, lines 29: "able to" is written double.
On page 4, lines 33-34: "...and new impression was made", it should read, "...and a new impression was made."
On page 4, lines 58: "...the data were input into SPSS...", should read, " the data was inserted into SPSS..."

RESULTS

The data means are presented as range, this is not accurate and should be separate for each outcome, alternatively the Tables already present the results, alternatively the authors should address the outcome highlights and not textually restate the results. Also, the presentation of the results in the current format implies that the data in Table 1 (in the text) can clustered and that the SD also applies to the range of means, while the datasets come from different groups. Table 1 legends should include information like, "the data are presented in mean (SD) or median (range).

DISCUSSION

The Discussion should start with a brief retelling of the study aims followed by the current starting statement.

On page 6, lines 4-5: include a period at the end of "et al.", please check that all other "et al." have a period. The line 7 statement should read: "...using polysulfide, polyether, and with the addition of PVS impression materials."

Author's rebuttal

Statement to reviewer: We truly thank you for your valuable and professional comments! We have addressed all of them (hopefully) and we either agreed with them or modified accordingly or we explained our point of view and defended them. Thanks again!

Reviewer: A research report on the viscosity of polyvinyl siloxane (PVS) impression materials and their effects on impression accuracy on a prepared stone die is presented by the authors. A regular (monophase), light body with regular body, light body and heavy body, and light body with putty were compared. The authors conclude that impressions taken with a light body and putty produces a die with increased inter-abutment distance. Occlusogingival length was accurate for all applied combinations of PVS viscosity materials, and that a light body with a more viscous PVS impression material produced an accurate shoulder width. The authors recommend considering applications of different PVS combinations to fit the purpose for their use, for example when taking impressions for bridge work or crown work respectively. In general, the manuscript is well written, there are a few minor recommendations that will help improve the overall quality of the report.

Thank you!

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Edited according to reviewer's comment

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Please revise statement on page 1, lines 18-24: "Synthetic elastomeric impression was first introduced in the late 1950s and became popular because it the poor dimensional stability and inadequate tear resistance..." This statement reads poorly and is confusing.

Some of the text was missing, statement is phrased properly.

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Edited according to reviewer's comment

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Edited according to reviewer's comment

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Duplication removed

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Both edited according to reviewer's comment

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A new paragraph was added to the Results section making it more clear and accurate

DISCUSSION

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Edited according to reviewer's comment

2nd Editorial decision

Date: 3-Apr-2018

Ref.: Ms. No. JCTRes-D-17-00010R1

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Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger

Editor-in-Chief

Journal of Clinical and Translational Research

Comments from the editors and reviewers: