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OPEN PEER REVIEW

Location of the Optic Foramen Relative to the Sphenoid Sinus and Orbital Apex Structures

Selim Cinaroglu, Kursad Ramazan Zor, Kursat Guresci, Hacı Keles

SUBMITTED	REVISED	ACCEPTED	DOI
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About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

More about open peer review: brieflands.com/knowledgebase/opr

Contents

1 **Original submission** Referee 1, Associate Editor, Editor-in-Chief 2
2 **Revision 1** Editor-in-Chief 4
Authors' reply to reviewers 5
Reviewer and editor comments 6
3 **Revision 2** 7
Authors' reply to reviewers 8
Reviewer and editor comments 12
4 **Revision 3** Editor-in-Chief 13
Authors' reply to reviewers 14
Reviewer and editor comments 18
5 **Revision 4** Editor-in-Chief 19
Authors' reply to reviewers 20
Reviewer and editor comments 23

1 Original submission

3 comments · 15 Sep 2021 – 25 Oct 2021

Referee 1 Reviewer

MAJOR REVISION 15 Sep 2021

Thanks for your submission to the IJR.
Overall, it can be said that this manuscript is relatively appropriate in terms of methodology, but it needs some revisions as follows:
1. For these objectives, a sample size of 64 is very small. What are your rationale and assumptions for this sample size?
2. It must be written according to the IJR's scientific writing structure.
3. In the abstract, the following points must be added to the methods:
3.1. Study design (Cross-sectional)
3.2. Sampling method and reference population
3.3. Calendar dates of the study
3.4. Statistical analysis
4. In the abstract, the following must be added to the results:
4.1. First, the demographic characteristics of the samples
4.2. Whenever a variable is compared between two groups, its values and significance level must be presented in parentheses.
5. Full-text methods:
5.1. Must be written with subheadings
5.2. Inclusion and exclusion criteria must be added.
5.3. The ethics code must be mentioned in parentheses.
5.4. Study design (Cross-sectional)
5.5. Sampling method and reference population
5.6. The statistical analysis must be fully explained, including descriptive measures, normality tests, and analytical tests.
5.7. The statistical analysis must be written in the order in which the results and tables are presented.
5.8. The significance level must be specified.
6. Tables: For analytical tests, the critical value and p-value must be presented.

Associate Editor

MAJOR REVISION 25 Oct 2021

Dear Authors

The study needs major revision based on the peer reviewers' remarks.

Best regards
Sharifkashani MD.

Editor-in-Chief MAJOR REVISION 25 Oct 2021

Dear authors,
Your article needs Major Revision.
Regards

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Answers to referees

Reviewer 1

For measurements, the part of the optic canal opening to the orbit was taken as a reference.

In the studies carried out;

To achieve maximum decompression, surgeons should open the orbit (medial orbital wall) up to the apex, including the foramen opticum and the annulus of Zinn.

In the light of this information, we aimed to reveal the relationship between Foramen Opticum and Sinus Sphenoidalis, which is necessary for Orbital Decompression Surgery, through CT images of individuals in Central Anatolia. We have also shown by the study that the anterior surface of the sinus sphenoidalis is in different places compared to the foramen opticum.

Reviewer 2

For this study, people who applied to our hospital between March 15 and April 15 were examined. 128 orbita in 64 people included in the study were examined. An article published in the journal Nature looked at 100 orbitals in 50 people and made similar measurements. Based on this article, it was thought that these numbers would be sufficient.

Also, no p-value was obtained in this study, and we only looked at distributions and mean standard deviation.

2 Revision 1

1 comment · 19 Jan 2022

Editor-in-Chief

MAJOR REVISION 19 Jan 2022

Dear authors,
According to the methodological reviewer, the article is not acceptable for publication in this format, and any decision depends on your reply to the reviewer and a major revision.
Regards

3

Revision 2

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reply to the reviewers' comments

Reviewer Number	Original comments of the reviewer	Reply by the author(s)	Changes done on page number and line number
Reviewer 1	The optic canal in an oblique cylindrical canal (not just a distinct foramen) and the anterior surface of the sphenoid sinus has many variations in location. I can't realize which part of the canal (anterior, middle, posterior?) has been chosen as a reference for measurements. Also, regarding the variable locations of the anterior surface of the sphenoid sinus, how much the measurements could be precise and valid	For measurements, the part of the optic canal opening to the orbit was taken as a reference. In the studies carried out; To achieve maximum decompression, surgeons should open the orbit (medial orbital wall) up to the apex, including the foramen opticum and the annulus of Zinn. In the light of this information, we aimed to reveal the relationship between Foramen Opticum and Sinus Sphenoidalis, which is necessary for Orbital Decompression Surgery, through CT images of individuals in Central Anatolia. We have also shown by the study that the anterior surface of the sinus sphenoidalis is in different places compared to the foramen opticum.	------
Reviewer 2	For these objective, 64 samples is very small. What are your rations and assumptions for this sample size?	We did a G power analysis for the sample size and added it to the article.	Page number : 4 Line number: 21-25
Reviewer 2	It must be written according to IJR scientific writing structure	Edited.	------
Reviewer 2	3. In abstract method must be added these points: 3.1. Design of study (Cross-sectional) 3.2. Sampling method and reference population 3.3. Calendar time of study 3.4. Statistical analysis	3.1. Done 3.2. Done 3.3. Done 3.4. Done	3.1. Page number : 1 Line number: 11 3.2. Page number : 1 Line number: 12-13 3.3. Page number : 1 Line number: 11 3.4. Page number : 1

			Line number: 18
Reviewer 2	4. In abstract results must be added: 4.1. Firstly, demographic characteristic of samples 4.2. Whenever, a variable compared between two groups, it must be presented their values and significance level in the parenthesis	4.1. Added 4.2. In this study, only descriptive statistical values were used, so no P value was given.	4.1. Page number : 1 Line number: 19-20
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Reviewer 1	Tables: For analytical test must be presented critical value and p-value.	In this study, there is no p value because descriptive analyzes were performed.	

Reviewer 1	All the cases raised in the first time review should be answered point by point, and then the relevant changes in the text should be applied.	Done.	---------
Reviewer 1	In the title and purpose of the study, the word of relationship was used, but somewhere the level of significance or 95% confidence interval was not provided. In addition, in the statistical analysis section, it was mentioned that cross-tab(Chi-square) was used but not presented any p-value.	Done. We looked at the chi-square in this study, but we did not add it because it was meaningless. However, we forgot to remove the chi-square expression from the text. We add the chi-square method we have done as a table	

		below.	
Reviewer 1	Explanation of sample size adequacy should be based on statistical assumptions and power analysis results. By the way, I could not find the study you implied (without mention of volume, issue and No); In addition, the sample size is related to the type of study, purpose, and variance of variable in the study population.	Aujla, J. S., Curragh, D. S., Patel, S., Selva, D. 2020. Orbital apex anatomy: relationship between the optic foramen and anterior face of sphenoid sinus—a radiological study. Eye, 1-6. https://doi.org/10.1038/s41433-020-01289-w [PMID: 33223532] The article mentioned is above. Also, required corrections were made.	

Dear Reviewer thanks for your valuable comments.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1,586[a]	2	,453
Likelihood Ratio	1,593	2	,451
Linear-by-Linear Association	,030	1	,863
N of Valid Cases	64		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 8,00.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3,802[a]	2	,149
Likelihood Ratio	3,869	2	,145
Linear-by-Linear Association	,794	1	,373
N of Valid Cases	64		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,50.

3 Revision 2

0 comments

No public comments in this round.

4

Revision 3

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

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N of Valid Cases	64		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,50.

4 Revision 3

1 comment · 16 Mar 2022

Editor-in-Chief

MINOR REVISION 16 Mar 2022

Dear authors,
Your article needs Minor Revision.
Regards

5

Revision 4

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reply to the reviewers' comments

Reviewer Number	Original comments of the reviewers and editors	Reply by the author(s)	Changes done on page number and line number
Reviewer 1	Thanks from authors for applying comments. At present, this manuscript is acceptable for publication in the IJR according to methodology point of view.	Thanks for the valuable comments.	------
Reviewer 2	This paper is suitable for publication.	Thanks for the valuable comments.	------
Associate Editor 1	Dear Authors; The corrections are fulfilled and the article is acceptable for publishing in IJR. Best Regards Sharifkashani MD.	Thanks for the valuable comments.	------
Associate Editor 2	1. In the line 11, there is this sentence that is wrong. Please correct: "In this cross-sectional study conducted during 15 March and 15 April 2021, were included"	Done.	1. Page number: 1 Line number: 11-13
Associate Editor 2	2. Thi sentence in line 13 is unclear: "In this study was used for the purposive sampling method."	Edited.	4.1. Page number: 1 Line number: 12-13
Associate Editor 2	3. Please correct the part: "(6,7,8,9)" to (6-9)	Corrected.	3. Page number: 3 Line number: 3
Associate Editor 2	4. What is the meaning of this sentence: "In this study was used for the purposive sampling method." This sentence seems unclear	Corrected.	4. Page number: 3 Line number: 17-18
Associate Editor 2	5. Please mention this part in a separate sentence: "Somatom Sensation 64, Siemens Medical Solutions"	Done.	Page number: 3 Line number: 19-20
Associate Editor 2	6. Please change Statistical Evaluations to Statistical Analyses.	Done.	Page number: 4 Line number: 21
Associate Editor 2	7. Please change df to degree of freedom.	The expression "df" was removed from the article because we deleted the paragraph	------

		requested by the editor in critique number 8.	
Associate Editor 2	8. The authors have mentioned a part in statistical analysis section that is totally irrelevant to the paper and I can not understand this part: “”A priori power analysis was executed by using G*Power 3.1 (10,11). Goodness-of-fit tests: Contingency tables were used as statistical test for detecting a large effect size for Cramer’s V while df is 2, which equals to 0,5, with alpha (α err prob) of 0,05. The comparison of the localization of foramen opticum depending to gender required minimum 39 participants. The actual power (1-β err prob) of the analysis was 0,8.” I think they have pasted this part from another reference. I think they should omit this part.	The mentioned paragraph has been removed from the article.	------
Associate Editor 2	9. In addition, this part in stat method is unrelated to paper: The normality of the variables was tested by Kurtosis and Skewness as proposed by Tabachnick and Fidell (12). i think this part should be deleted.	Deleted.	------
Associate Editor 2	10. This sentence is unclear: “The comparison of the localization of foramen opticum depending to gender required minimum 39 participants	This paragraph has been deleted in response to comment number 8.	----------
Associate Editor 2	11. In table 1, there are two percents for each number that are percents in row and column. Please design table that show this point. In this format, it is confusing.	The table has been redesigned by adding a new column to the table.	Page number: 8 Line number: 6-7

Associate Editor 2	12. The term bound in tables 3 and 4 is unclear for me. Do the authors mean band? [lower band and upper band??] I recommend they can use minimum and maximum instead of lower and upper bound.	“Lower band” and “upper band” expressions changed to “min” and “max”	Page number: 8 Line number: 12-13 Page number: 9 Line number:1-2
Associate Editor 2	13. Please follow journal format in references. For example, journal names should be abbreviated	Done.	

Dear Reviewers and Editors, thanks for your valuable comments.

5 Revision 4

1 comment · 29 Mar 2022

Editor-in-Chief

ACCEPT 29 Mar 2022

Dear authors,
Your article is acceptable for publication in IJR.
Regards