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OPEN PEER REVIEW

Risk Factors for Post-traumatic Epilepsy in Patients with Traumatic Brain Injuries

Hassan Reza Mohammadi, Masoud Hatefi, Aryoobarzan Rahmatian, Sohrab Sadeghi

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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.

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1 Original submission

4 comments · 29 Dec 2023 – 30 Dec 2023

Referee 1 Reviewer

MINOR REVISION 29 Dec 2023

Dear Author
If the following defects are fixed, the article can be published.
1. Mention the study design.
2. The abstract needs major correction and editing. The text of the abstract is in no way suitable for the abstract of an original article.
3. Describe the population of interest, research variable, and demographic/factor variables.
4. Describe the statistical test, level of significance, etc.

Referee 2 Reviewer

MAJOR REVISION 30 Dec 2023

Dear AE,
The retrospective nature of the study may introduce biases, as it relies on past records which might not have consistent data quality. A prospective study design could offer more controlled and uniform data collection.
It's unclear how representative the sample is of the broader TBI population. The inclusion and exclusion criteria might also affect the generalizability of the results.
While CT scans are mentioned, the study could be strengthened by including more advanced neuroimaging techniques such as MRI, which might provide more detailed insights into brain changes post-TBI.

The study focuses on immediate factors like the severity of injury and CT scan findings but does not extensively explore other potential risk factors such as genetic predispositions, previous neurological history, or the specific location and type of brain injury.
The study's findings need to be contextualized in terms of their implications for clinical practice. How can this information be used to improve patient outcomes or guide treatment decisions?

Associate Editor

MAJOR REVISION 30 Dec 2023

Dear EIC,
Thanks to the authors and appreciation to the researchers. The manuscript presents valuable research. But some revisions are needed. The authors should revise it based on the comments. Also, minor changes should be made in the abstract:
1- The study design should be mentioned in the first line of the methods section of the ABSTRACT.
2-A summary of the statistical analysis results should be mentioned in the results section of the ABSTRACT.

Editor-in-Chief

MAJOR REVISION 30 Dec 2023

Dear Author,
Thank you for submitting the article. It needs some revision. Please revise it based on the reviewers' and AE's comments.

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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.

Reviewer 1:

Reply:

The abstract needs major correction and editing. The text of the abstract is in no way suitable for the abstract of an original article.

Methods: In the retrospective study**,** the CT-SCAN results of all TBI patients were investigated in this retrospective study. at first, initial evaluation including examination of airways, vital signs and breathing was performed and the level of consciousness was checked according to GCS for all traumatic patients. then, the results of all CT scans were evaluated by a neurologist. If the patient had PTE, (s) he was included in the study. Data analysis was carried out using descriptive statistics in SPSS ver. 16.

Reply:

Reviewer 2:

Reply:

Line 70-73 needs correction.

Reply:

Ok, edited

What does "foregoing" mean in line number 74?

Reply:

Ok, edited

In line 79, there are extra parentheses.

Reply:

Ok, edited

Line 80 needs editing. Write: the criteria for entering and exiting the study

Reply:

Inclusion criteria includes all patients over 20 years old with TBI who were admitted to the emergency department of the hospital within 24 hours and underwent CT-SCAN procedure. Exclusion criteria also included patients with multiple traumata, systemic and chronic disease, diabetes, endocrine disorders, bleeding disorders, pregnancy, chronic heart failure, history of

epilepsy, and use of anticonvulsants. data was collected using a checklist including questions on age, gender, education, marriage, trauma mechanism and CT scan findings (Table 1-4).

In the discussion section, refer to the reports of two systematic review and meta-analysis articles.

Reply:

Reference number 22 needs to be corrected.

Reply:

22. momenyan1 S, Kabiri F, gholamichaboki1 B, Arjmand3 a, Heidarifar4 r: Reliability and predictive validity of outcome at discharge of Glascow coma scale in an intensive care unit population. Koomesh journal 2016, 19(1):129-134. URL: http://koomeshjournal.semums.ac.ir/article-1-3202-en.html

References need to be updated.

Reply:

The updated references are highlighted in green.

Reviewer 3:

The retrospective nature of the study may introduce biases, as it relies on past records which might not have consistent data quality. A prospective study design could offer more controlled and uniform data collection.

It's unclear how representative the sample is of the broader TBI population. The inclusion and exclusion criteria might also affect the generalizability of the results.

While CT scans are mentioned, the study could be strengthened by including more advanced neuroimaging techniques such as MRI, which might provide more detailed insights into brain changes post-TBI.

Reply:

This study has been done with special precision and sensitivity. To collect the data, the necessary information has been collected completely and accurately. Therefore, there has been no problem in this regard. The researchers confirm the accuracy of the recorded information.

Associate Editor 1:

Dear EIC,

Thanks to the authors and appreciation to the researchers. The manuscript is valuable research. But some revisions are needed. Authors should revise it based on comments. Also, minor changes should be done in abstract:

1-Study design should be mentioned in first line of method section of ABSTRACT

Reply:

Methods: In the retrospective study**,** the CT-SCAN results of all TBI patients were investigated in this retrospective study. at first, initial evaluation including examination of airways, vital signs and breathing was performed and the level of consciousness was checked according to GCS for all traumatic patients. then, the results of all CT scans were evaluated by a neurologist. If the patient had PTE, (s) he was included in the study. Data analysis was carried out using descriptive statistics in SPSS ver. 16.

2-Summary of Statistical analysis results should be mention in result section of ABSTRACT.

Reply:

Results: Results showed, mild, moderate, and severe GCS scores were reported in 8 (14.3%), 30(52.5%) and 18(32.2%) of the participants, respectively. Vehicle accidents were the main cause of TBI (n=34, 60%) and the lowest TBI rate was due to other cases (n=4, 7.2%). The most and least frequent CT-SCAN finding was epidural hemorrhage (n= 24, 42.3%) and midline shift and intracerebral hemorrhage (n= 6, 10.8%) and total of 24 (42.3%) of the patients had tonic epilepsy and 10 (17.9%) of the patients had epilepsy duration of more than 10 minutes.

2 Revision 1

3 comments · 1 Jan 2024 – 4 Jan 2024

Referee 2 Reviewer

ACCEPT 1 Jan 2024

Dear AE
Previous errors have been corrected, and there are no further recommendations.

Associate Editor

ACCEPT 4 Jan 2024

Dear EIC,
I reviewed the manuscript again. The great effort in improving the manuscript is highly appreciated.
The authors have addressed all comments.
Thank you

Editor-in-Chief

ACCEPT 4 Jan 2024

Dear Author,
Thank you for paying attention and responding to the reviewer's comments.