

# EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: a retrospective analysis

Lalita Gouri Mitra, Geeta Rajput, Vandana Saluja\*, Guresh Kumar

\*Corresponding author

Vandana Saluja

Department of Anaesthesia Critical Care, Institute of Liver and Biliary Sciences, New Delhi New Delhi

Handling editor:

Michal Heger

Department of Pharmaceutics, Utrecht University, the Netherlands Department of Pharmaceutics, Jiaxing University Medical College, Zhejiang, China

#### Review timeline:

Received: 16 October, 2020 Editorial decision: 19 November, 2020 Revision received: 21 November, 2020 Editorial decision: 30 March, 2021 Revision received: 30 March, 2021 Editorial decision: 30 March, 2021 Revision received: 30 March, 2021 Editorial decision: 6 April, 2021 Revision received: 6 April, 2021 Editorial decision: 27 April, 2021 Revision received: 7 May, 2021 Editorial decision: 19 May, 2021 Revision received: 20 May, 2021 Editorial decision: 24 May, 2021 Revision received: 31 May, 2021 Editorial decision: 14 June, 2021 Published online: 16 July, 2021

1<sup>st</sup> Editorial decision 19-Nov-2020

Ref.: Ms. No. JCTRes-D-20-00118

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis Journal of Clinical and Translational Research

Dear Dr Saluja,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.



For your guidance, reviewers' comments are appended below. Additionally, please polish the language in accordance with academic standards and our author guidelines. We cannot accept manuscripts that are poorly written.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.

Your revision is due by Dec 19, 2020.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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 #1: I read this report with interest but had some questions.

#### Major

How was the HE grade assessed and defined?

At what time point in relation to ICU stay was the EEG performed? Could the association between abnormal EEG and Length Of Stay reflect a greater sedation load in those with abnormal EEGs?

Was the association of abnormal EEG findings with mortality simply a reflection of severity of liver disease or multi-organ failure? was the association independent on multivariate analysis?

#### Minor

Throughout the report the number of decimal points expressed is excessive. Was ammonia measured in arterial or venous blood? what units is expressed in?

Authors' response

#### Rebuttal letter

#### Major

- 1. How was the HE grades assessed and defined?
- It was assessed and defined as per West haven criteria which has been mentioned in the manuscript (page 4 line 16: reference number 8)
- 2. At what time point in relation to ICU stay was the EEG performed? Could the



## association between abnormal EEG and Length of Stay reflect a greater sedation load in those with abnormal EEGs?

The EEG was done after 24 hrs of cessation of sedation and only those patients were enrolled in which other cofounding factors for altered sensorium/ delayed awakening were ruled out. (page 5 line 21-25)

## 3. Was the association of abnormal EEG findings with mortality simply a reflection of severity of liver disease or multi-organ failure? was the association independent on multivariate analysis?

MELD EEG has shown to be a strong predictor for 28 mortality (this has been quoted in the manuscript).

However current literature is available only for patients with liver disease who are in hepatic encephalopathy grade 1 and 2.

Data is lacking in patients who have grade 3 and 4. However grade 3 and 4 hepatic encephalopathy is not indicative of the severity of liver disease.

Most centres in 3<sup>rd</sup> world countries do not have access to regular measurement of serum ammonia levels or CT scans, hence a non-expensive modality like an EEG can be incorporated to prognosticate the morbidity in liver patients.

EEG findings had a strong independent association on a multivariate analysis, and this also has been incorporated in the manuscript. (page 10 line 1-10, Table 3)

#### Minor

#### 1. Throughout the report the number of decimal points expressed is excessive.

-This suggestion has been incorporated; as advised by our statistician 2 digits after decimal have been used for some values, rest have been rounded off to the nearest zero.

## **2.** Was ammonia measured in arterial or venous blood? what units is expressed in? -Arterial ammonia levels were analysis and results are expressed in µmol/L. (page 9 table 2).

2<sup>nd</sup> Editorial decision 30-Mar-2021

Ref.: Ms. No. JCTRes-D-20-00118R1

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis 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 Apr 29, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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:

Dear authors,

Thank you for submitting your revised manuscript to JCTR.

According to the reviewer, the comments have been sufficiently addressed and your manuscript is now eligible for publication.

Before we can proceed, however, the manuscript must be proofread to eliminate any linguistic errors and inconsistencies. The English writing should be raised to academic level, as per our author guidelines (https://www.jctres.com/en/author-guidelines/).

Furthermore, items such as "&" should be removed, spaces should be placed between values and units/symbols, and only words that warrant capitalization should be capitalized.

Please do not take this request lightly in order to prevent us ending up in a stand-off. JCTR cannot publish manuscripts that are sub-par in writing and scientific content.

Thank you and kindest regards,

Michal Heger Editor

Authors' response

30 March 2021

To,

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

Subject: Revision JCTRes-D-20-00118R1

Dear Dr. Michal Heger,



We thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled "EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis."

We have addressed all comments of the reviewers using the track changes function in Word (attached as supplementary material not for publication). Moreover, every modification or rebuttal of the reviewer's comments is detailed per comment below in red italics.

We are grateful for the useful comments of the reviewers, as a result of which the paper has been considerably improved.

We hope it meets the standard of your esteemed journal. The vocabulary and grammar has been corrected using Grammarly premium.

On behalf of all the authors,

Kind regards,

Dr Vandana Saluja

MD, PDCC Liver Transplant Ax- Anaesthesia Associate Professor - Critical Care Institute of Liver and Biliary Sciences, D-1, Vasant Kunj, New Delhi - 110070, India

Review 1. Before we can proceed, however, the manuscript must be proofread to eliminate any linguistic errors and inconsistencies. The English writing should be raised to academic level, as per our author guidelines

Reply: We have revised the wording and corrected both our vocabulary and grammar using Grammarly premium following your guidelines.

Review 2. Furthermore, items such as "&" should be removed, spaces should be placed between values and units/symbols, and only words that warrant capitalization should be capitalized.

Reply: All necessary changes have been made and can be followed in the track changes.

3<sup>rd</sup> Editorial decision 30-March-2021

Ref.: Ms. No. JCTRes-D-20-00118R2

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis 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 Apr 29, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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:

Dear authors.

I am sorry, but your modifications are not sufficient to warrant publication of your manuscript in current state.

For example, Table 2 legend and content alone exhibit a blatant disregard of my request to polish the language, giving you specific instructions regarding capitalization and space insertion.

Please be more meticulous in the next round.

Thank you and kindest regards,

Michal Heger Editor

Authors' response

31st March 2021

To.

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

Subject: Revision JCTRes-D-20-00118R1



Dear Dr. Michal Heger,

We thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled "EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis."

We have addressed all comments of the reviewers using the track changes function in Word (attached as supplementary material not for publication). Moreover, every modification or rebuttal of the reviewer's comments is detailed per comment below in red italics.

We are grateful for the useful comments of the reviewers, as a result of which the paper has improved further.

It was not our intention to ignore your advice. We have sincerely tried to correct our English to best of our ability and understanding. We hope it now meets the standard of your esteemed journal. The vocabulary and grammar have been corrected using Grammarly premium. If any further grammatical correction or improvement in vocabulary is required, kindly do advice. We shall keep making amends till it meets your approval.

On behalf of all the authors,

Kind regards,

Dr Vandana Saluja

MD, PDCC Liver Transplant Ax- Anaesthesia Associate Professor - Critical Care Institute of Liver and Biliary Sciences, D-1, Vasant Kunj, New Delhi - 110070, India

Review 1. able 2 legend and content alone exhibit a blatant disregard of my request to polish the language, giving you specific instructions regarding capitalization and space insertion.

Please be more meticulous in the next round.

Reply: We have revised the wording and corrected both our vocabulary and grammar using Grammarly premium following your advice. Capital letters have been removed and space between numbers and symbols has been given.

4<sup>rd</sup> Editorial decision 06-Apr-2021

Ref.: Ms. No. JCTRes-D-20-00118R3

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis 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 May 06, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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:

Dear authors.

Thank you for another round of corrections.

Unfortunately, the manuscript is still not up to par with our expectations.

Few examples (again), indicated as manuscript page on bottom left/line number:

14/2: (p-value 0.012), a higher SOFA score at admission (p-value = 0.008) -> why insert the equal sign in the second p-value mention but not the first? Moreover, it should be written as p = xxx, without "value"

10/4: why is the E capitalized in Encelopathy?

10/5: SOFA does not contain names as CTP (line 6), so the words should not be capitalized. Same applies to MELD (line 7).

Table 2, \* should be defined as mean  $\pm$  standard deviation

8/49: no spaces before and after = sign

And so forth.

Please have a native speaker or someone who is meticulous in writing look at the paper.

Thank you and kindets regards,

Michal Heger Editor



6<sup>th</sup> April 2021

To,

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

Subject: Revision JCTRes-D-20-00118R1

Dear Dr. Michal Heger,

We thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled "EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis."

We have addressed all comments of the reviewers using the track changes function in Word (attached as supplementary material not for publication). Moreover, every modification or rebuttal of the reviewer's comments is detailed per comment below in red italics.

We are grateful for the useful comments of the reviewers, as a result of which the paper has improved further.

Sir, we have made the corrections suggested and have got a senior faculty to review our paper (Prof Dr Deepak Tempe). If any further grammatical correction or improvement in vocabulary is required, kindly do advice. We shall keep making amends till it meets your approval.

On behalf of all the authors,

Kind regards,

Dr Vandana Saluja

MD, PDCC Liver Transplant Ax- Anaesthesia Associate Professor - Critical Care Institute of Liver and Biliary Sciences, D-1, Vasant Kunj, New Delhi - 110070, India

14/2: (p-value 0.012), a higher SOFA score at admission (p-value = 0.008) -> why insert the equal sign in the second p-value mention but not the first? Moreover, it should be written as p = xxx, without "value"

Reply: Corrections made

10/4: why is the E capitalized in Encelopathy?

Reply: Corrections made

10/5: SOFA does not contain names as CTP (line 6), so the words should not be capitalized. Same applies to MELD (line 7).



Reply: Corrections made

Table 2, \* should be defined as mean  $\pm$  standard deviation

Reply: Corrections made

8/49: no spaces before and after = sign

Reply: Corrections made

5th Editorial decision 27-Apr-2021

Ref.: Ms. No. JCTRes-D-20-00118R4

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis 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 May 27, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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:

Dear authors,

Thank you for resubmitting your work to JCTR. Although the corrections implemented are appreciated, the linguistic level is still not up to par with what the journal expects. The paper was clearly not corrected by a native speaker given the fact that it is replete with syntax errors that an English speaker would never make.



Please take care to correct the manuscript using a language editing service, either by involving a native speaker, contracting a third-party service provider, or contacting the journal editorial office (m.heger@jctres.com). We offer in-house services regarding language editing.

Thank you,

Michal Heger Editor

Authors' response

7<sup>th</sup> May 2021

To,

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

Subject: Revision JCTRes-D-20-00118R1

Dear Dr. Michal Heger,

We thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled "EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis."

We apologise for the linguistic level and syntax errors. We have tried to address the comments of the reviewers using the track changes function in Word. Since there were a number of changes, we haven't given point to point replies. Overall, an attempt has been made to correct the manuscript for language, grammar and punctuations.

We apologise for the wrong list of References. It has been completely replaced.

We are grateful for the useful comments of the reviewers, as a result of which the paper has improved further.

On behalf of all the authors,

Kind regards,

Dr Vandana Saluja

MD, PDCC Liver Transplant Ax- Anaesthesia Associate Professor - Critical Care Institute of Liver and Biliary Sciences, D-1, Vasant Kunj, New Delhi - 110070, India

6<sup>th</sup> Editorial decision 19-May-2021



Ref.: Ms. No. JCTRes-D-20-00118R5

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis 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 Jun 18, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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:

Please see the attached document that indicates how many language mistakes are still left in your text.

You really need to be more professional in addressing this.

We are not a second-tier journal and unwilling to compromise on anything below top qiality.

Thanks for understanding.

Michal Heger Editor

There is additional documentation related to this decision letter. To access the file(s), please click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

Authors' response

20<sup>th</sup> May 2021



To,

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

Subject: Revision JCTRes-D-20-00118R1

Dear Dr. Michal Heger,

We thank you for giving us an opportunity to resubmit a revised version of our manuscript entitled "EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis."

We apologize for the errors. We have tried to address the comments of the reviewers using the track changes function in Word. A point to point reply regarding the changes is presented below. Overall, an attempt has been made to correct the manuscript for language, grammar and punctuations.

We fully understand the need for the submission to be of top quality and our efforts are only in that direction.

We are grateful for the useful comments of the reviewers, as a result of which the paper has improved further.

On behalf of all the authors,

Kind regards,

Dr Vandana Saluja

MD, PDCC Liver Transplant Ax- Anaesthesia Associate Professor - Critical Care Institute of Liver and Biliary Sciences, D-1, Vasant Kunj, New Delhi - 110070, India

Point to point reply

Page no/Line no.:

8	
1/7:	deletion done
1/9:	deletion done
1/11:	deletion done
1/13:	deletion done
1/21-23:	Language and grammar changed
1/25:	language changed
2/1:	grammar changed

Action taken



2/3:	language changed
2/6-12:	language and grammar changed as advised
2/19:	'a' replaced with 'an'
4/19:	'severity of' deleted
5/5:	'outcome in terms of' deleted
5/23:	'were' replaced with 'was'
5/25:	'L' changed to lowercase
6/12:	space introduced
6/14:	'patient outcome in terms of' deleted
7/4:	appropriate spacing done
8/1:	spelling corrected
8/8-9:	appropriate spacing done
9/2:	appropriate spacing done
9/4:	appropriate spacing done
9/6:	appropriate spacing done
10/6:	appropriate spacing done
11/8:	appropriate spacing done
12/5-7:	appropriate spacing done; 'of' replaced with 'on'
14/2:	'For' replaced with 'for'
14/8:	appropriate spacing done
14/11-12:	appropriate spacing done
14/21:	'especially' deleted
14/22:	appropriate spacing done
15/1-2:	appropriate spacing done
15/5-6:	appropriate spacing done
15/13-15:	appropriate spacing done
15/22-23:	appropriate spacing done
16/2:	appropriate spacing done
16/19-20:	appropriate spacing done



7<sup>th</sup> Editorial decision 24-May-2021

Ref.: Ms. No. JCTRes-D-20-00118R6

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: a retrospective analysis 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 Jun 23, 2021.

To submit a revision, go to https://www.editorialmanager.com/jctres/ 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:

Dear authors,

I have done another round of modifications in your manuscript, see attached.

I am giving you one more chance to raise the level of the text. If your next revision is not up to our standards, I WILL BE FORCED TO REJECT YOUR PAPER.

This has taken too much time and has brought us nowhere.

Kindest regards,

Michal Heger EiC

There is additional documentation related to this decision letter. To access the file(s), please



click the link below. You may also login to the system and click the 'View Attachments' link in the Action column.

Authors' response
31 <sup>st</sup> May 2021
To,
Dr. Michal Heger
Editor-in-Chief
Journal of Clinical and Translational Research
Subject: Revision JCTRes-D-20-00118R1
Dear Dr. Michal Heger,
We thank you for giving us an opportunity to resubmit a revised version of our manuscript
entitled "EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV
hepatic encephalopathy requiring mechanical ventilation: A Retrospective analysis."
We are grateful to you, for sharing your guide for scientific writing and English language.
We have referred to your 'Writing rules' and tried to address the issues with the manuscript.
We are grateful for your useful comments, as a result of which the paper has improved further
and sincerely thank you for the diligent feedback.
As the corrections are trackable in the document, we haven't provided details.
On behalf of all the authors,

Kind regards,

Dr Vandana Saluja

MD, PDCC Liver Transplant Anaesthesia



Associate Professor - Critical Care

Institute of Liver and Biliary Sciences,

D-1, Vasant Kunj, New Delhi - 110070, India

8th Editorial decision 14-Jun-2021

Ref.: Ms. No. JCTRes-D-20-00118R7

EEG abnormality as a prognostic factor in cirrhotic patients with grade III-IV hepatic encephalopathy requiring mechanical ventilation: a retrospective analysis Journal of Clinical and Translational Research

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: