

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Clinical Cases*

**Manuscript NO:** 71314

**Title:** Heterozygous deletion in the OTC gene results in ornithine transcarbamylase deficiency: A case report

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 03409194

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** Pakistan

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-09-03

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-09-06 06:39

**Reviewer performed review:** 2021-09-13 09:08

**Review time:** 7 Days and 2 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input checked="" type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

<b>Peer-reviewer statements</b>	Peer-Review: <input checked="" type="checkbox"/> Anonymous <input type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
-------------------------------------	---

## SPECIFIC COMMENTS TO AUTHORS

In the manuscript, "A 10-bp deletion in the OTC gene results in ornithine transcarbamylase deficiency by early translation termination: A case report", Wang and colleagues present an affected boy with Ornithine transcarbamylase deficiency (OTCD) due to a novel deletion variation in OTC. Specific comment: There are more than 500 OTC reported pathogenic variants (<http://www.hgmd.cf.ac.uk/ac/gene.php?gene=OTC>). Therefore, the statement "...results confirm the pathogenic variation in OTC and provide strong evidence for further OTCD screening and clinical consultation.", should be revised to highlight the contribution of the current report. Minor Comment: 1. On page 2, please provide OMIM number for phenotype Ornithine transcarbamylase deficiency (OTCD). 2. On page 2, in the statement "The OTC gene (OMIM:300461) is located on position Xp11.4, contains 10 exons and 9 introns, and encodes 354 amino acids." Please replace "position" with "chromosome" and add "encodes a 354 amino acids protein", instead of the current wording. 3. On page 3, statements "in the neonatal onset group, it was completely lost," and "the late onset group, it was partially lost"; please replace "was" by "is". 4.

On page 3, statement "They are normal at birth, but gradually refuse ..." please re-word, "they have no symptoms at birth, but gradually refuse..." 5. On page 3: What are the "molecular function experiments" referred to? The data for biochemical investigations, exome sequencing and treatment is presented but there is no experiment regarding function. 6. On page 5, Please state that the variant is "absent" in all publicly available databases including gnomAD instead of writing "included". 7. For page 5: Please deposit the variant in ClinVar or other comparable databases such as LOVD and

insert the accession number in the manuscript. 8. On page 6: In the statement “other ornithine circulatory disorders; other genetic metabolic diseases, including organic acid hematic disease, fatty acid, beta oxygen defects, ...”, please replace “other” with “different” and “miscellaneous” respectively, in order to avoid the use of the word “other” multiple times. 9. On page 7: Please re-word the statement “Sanger sequencing fails in the detection of OTCD in approximately 20% of patients [10, 11], whereas NGS has the advantage of detecting small insertions or deletions”. In the cited papers, array CGH or multiplex ligation-dependent probe amplification were used to detect relatively large exon level insertions and deletions which are usually missed by both Sanger and exome sequencing. In special circumstances, exome sequencing may be used to detect these exon level duplications and deletions. However, this does not apply in the case presented here since Sanger sequencing is able to detect small 10bp deletion or insertion which is comparable to the detection by exome sequencing. 10. On page 7, “Our results provide evidence for the pathogenicity of our variant and accurate diagnosis for patients with the same variant.” Please re-word since the results do not provide evidence of pathogenicity since no such experiments were performed. However, the pathogenicity is inferred due to the extreme severity of the variant which is present in the gene known to cause the phenotype as detected in the patient. 11. On page 6: In the statement: “...there was no response to stimulation, and the patient was in a coma. The patient died soon after discharge.” Please clarify; did the patient recover from coma before discharge? Or was he discharged while in a coma? If he had recovered from coma, then please state whether he had a relapse at home. 12. On page 9, in table 2, please specify in the footnote what NE stands for.

## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Clinical Cases*

**Manuscript NO:** 71314

**Title:** Heterozygous deletion in the OTC gene results in ornithine transcarbamylase deficiency: A case report

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 01344350

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** Doctor

**Reviewer's Country/Territory:** Germany

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-09-03

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-09-14 06:40

**Reviewer performed review:** 2021-09-17 07:15

**Review time:** 3 Days

Scientific quality	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input checked="" type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** bpgoffice@wjgnet.com  
<https://www.wjgnet.com>

**Peer-reviewer  
statements**

Peer-Review: [ ☒ ] Anonymous [ ☐ ] Onymous

Conflicts-of-Interest: [ ☐ ] Yes [ ☒ ] No

#### **SPECIFIC COMMENTS TO AUTHORS**

This is an interesting and clinically relevant study.