Reviewer’s report

Title: The p.Phe174Ser mutation is associated with mild forms of Smith Lemli Opitz Syndrome

Version: 0 Date: 30 Nov 2015

Reviewer: MaBgorzata J.M. Nowaczyk

Reviewer's report:

Thank you for asking me to review this case report.

This is a well-written case report of a child with Smith-Lemli-Opitz syndrome (SLOS) with a previously reported mutation c.521T>C, p.Phe174Ser submitted for publication to illustrate the pathogenicity of this mutation.

The report is a bit repetitive and could use tightening (e.g., the fact that there are over 140 mutation in DHCR7 is stated three times). I suggest shortening by at least 20%.

It is indeed sad that a patient with such a typical facial appearance and the typical 2-3 toe syndactyly as this patient demonstrates was not diagnosed until age four years and that testing for Noonan syndrome, which this patient does not resemble at all, was performed first.

There are two second degree relative with "mild intellectual disability" reported in the Case Presentation. Were they tested for SLOS? It is not uncommon to have secondary cases because of the relative high carrier rate in the general population.

Smith-Lemli-Opitz syndrome: Objective assessment of facial phenotype, which clearly supports that the patient in this Case Reports presents with the typical facial appearance of mild SLOS.

Overall, this case report present further evidence of a previously reported pathogeneicity of the c.521T>C, p.Phe174Ser mutation.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable
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