Reviewer's report

**Title:** Substantially increased sildenafil bioavailability after sublingual administration in children with congenital heart disease: two case reports

**Version:** 1  
**Date:** 15 February 2014

**Reviewer:** Ruth Heying

Which of the following best describes what type of case report this is?: None

If other, please specify:

New administration of medication to achieve a better effect of the medication

Has the case been reported coherently?: No

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

Carls et al describe an increased bioavailability after sublingual administration of sildenafil in 2 patients. They conclude to choose for sublingual administration in patients with poor enteral availability.

Comments:

1/ Case 1 and 2: Please comment on the interaction of the different medications which are used. Do the other medications have any interference with sildenafil?

2/ Case 2: The cardiac diagnosis should be stated in a more systematic way.
Does this child have a univentricular physiology?

3/ Discussion: Congenital heart disease with pulmonary vascular diseases does not really go “usually” along with PHT. This sentence is too much simplifying. Please rewrite.

4/ Discussion middle part: Please explain phase I metabolic capacity.

5/ Conclusion: Please comment on a general recommendation of sublingual administration. Why do you not suggest this for a broader indication, not only for patients with poor enteral availability?

6/ Figures Case 2: sublingual administration: Please verify the use of solid and open symbols. Can it be that the metabolite is lower than the sildenafil?? Is there a mistake concerning change of symbols?? That does not fit with the other curves.

Minor comment:
Page 2, abstract conclusion: ….suggesting that not only the absorption……: change typing mistake

Quality of written English: Needs some language corrections before being published

Declaration of competing interests:
I have no competing interests.