Reviewer's report

Title: Clinical Features and Phylogenetic Analysis of Coxsackievirus A9 in Northern Taiwan in 2011

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Reviewer: Beatrix Kapusinszky

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CLINICAL FEATURES AND PHYLOGENETIC ANALYSIS OF COXSACKIEVIRUS A9 IN NORTHERN TAIWAN IN 2011 written by Yi-Chuan Huang and co-authors describes the clinical presentation of Coxsackie A9 (CV-A9) infections in order to upgrade the differential diagnosis of those infection from other diseases caused by non-polio enteroviruses and provides an inside into molecular epidemiology of CV-A9.

The paper needs to be improved with some major and couple minor modifications to meet the journal criteria before being accepted for publication.

Major Compulsory Revisions

1. Indicate in the text, how many isolates from current study was used to build the phylogenetic tree? Selection criteria, if it’s any?

2. Also provide the GenBank accession numbers for each sequences from your current study (Taiwan, 2011) used for phylogenetic tree construction. They must be deposited in the GenBank, because study is on phylogenetic analysis.

3. METHODS section needs to be renamed as MATERIALS and METHODS

4. In RESULTS section: “All the current CA9 strains from 2011 epidemic were within the same lineage and closest to the CA9 isolate 27-YN-2008 (GeneBank accession number HQ844647) which was isolated from one child near the border of Yunnan province, Mainland China and Myanmar in 2008. “

This need to be corrected to “….from healthy child near the border of Yunnan province…. “ all over the text, based on the information for CA9-HQ844647 in GenBank: Tian,B.J., Zhang,J., Tang,J.J., Chang,S.S. and Wen,H.M. “Virological investigation of enteroviruses from healthy children in the border areas of Yunnan province with Myanmar”, 2008 (unpublished)

Minor Essential Revisions:
1. In ABSTRACT section correct “…(CA9) was one of the most prevalent serotype…”

2. In ABSTRACT section for results correct: “…among whom, 6 cases…” Complicated cases included: aseptic meningitis (n=8), bronchopneumonia (n=6), etc. n=” (IN DISCUSSION the same correction for same data presentation needed).

“Phylogenetic analysis for our current CA9 strains…”

3. In INTRODUCTION section suggestion change the scientific language:

“We also constructed a phylogenetic tree in order to understand the molecular epidemiology of CA9 infections in Northern Taiwan.”

4. In METHODS in “Case definitions” correct “Throat swabs were taken…”

5. In METHODS correct “Viral identification, typing….”, because it’s a molecular typing. Correct: “The partial VP1 gene was amplified by RT-PCR…” Correct: “…nucleotide position from 97 to 412 based on the CA9 GenBank…”

6. In METHODS correct: With a newly obtained sequences n=13 (Accession numbers: …) 

“….we constructed a phylogenetic tree based on the 280 bp of VP1 region in MEGA…”

Check and correct the accession numbers in the GenBank for No. FJ868, GU142 (wrong numbers) and make the correction in the Figure 3 also. Remove repeat listing of CA16 reference from context.

7. In RESULTS in “Seasonal distribution and Demography” section correct: “were aged from 2 to 8…”, “The eldest patient…”

8. In RESULTS at Characteristics of skin rash paragraph correct 61% to Sixty one percent. 3% to Three percent.

9. In DISCUSSION correct: “The most common presentation on the skin was hand-foot and mouth disease (HFMD)”.

Correct: “In 2011 sixty one (61%) from 100 children infected with ….”

Correct: “The genome of enteroviruses encodes 11 proteins, including VP1 to VP4, 2A to 2C, and 3A to 3D. Among these genes, VP1…”

10. FIGURE LEGENDS: Figure 1. Correct: Typical skin rash observed in patients with CA9 infection.

Figure 3. Correct all the text: Phylogenetic tree of Coxsacie A9 (CV9), based on partial VP1 gene. In bracket CA9 isolate 27-YN-2008 isolated near the border of Yunnan province, Mainland China and Myanmar in 2008.
11. Figure 3. The word “gene” should be omitted from strains name, to make them consistent. Use Taiwan, 2011 in phylogenetic tree instead of “Current strains”. Does “rc” have meaning after the year in Taiwanese strains name?

**Level of interest:** An article whose findings are important to those with closely related research interests

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

**Statistical review:** No, the manuscript does not need to be seen by a statistician.