Reviewer’s report

Title: Increasing Incidence of Perineal MRSA Infections among Toddlers

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Reviewer: Birgit Strommenger

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Based on the observation of a six fold increase MRSA infections the authors aimed to examine the risk factors for caMRSA infections in children at Mercy Children’s hospital of Toledo. Sixty-thee corresponding MRSA isolates were characterized with respect to PFGE type, SCCmec type and the presence of pvl, ACME and cap5.

Data obtained revealed that 92% of MRSA isolates (58) were caMRSA all of them identified as USA300 based on their PFGE pattern. Typically, they all were SCCmec type IVa and pvl positive; the majority of isolates was positive for ACME.

Typing results were compared with those of the DiversiLab system and revealed concordant for the majority of isolates tested.

Specific comments:

The title of the article refers to the increasing incidence of perianeal MRSA infections; however there is no corresponding data in the text; the authors only report a six fold increase of MRSA infections; what does that mean in numbers. Is it possible to demonstrate this increase based on increasing case numbers during the previous years or month?

Abstract vs. Background:
“A six fold increase in caMRSA infections....” (abstract) vs. “a six fold increase in the number of MRSA infections...” (background)
I guess, the information in the background section is correct.

Materials and methods:
There is no demographic detail on the hospital. E.g. how many patients are treated....?

Discussion:
One aim of the study was to define risk factors for caMRSA infections in children. However, I did not find definite calculations about risk factors and probabilities. Most probably the case numbers are to low for more detailed calculations. However, this is not stated in the text. Thus, the discussion about putative risk factors remains speculative.
**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests'