Reviewer's report

Title: Increasing Incidence of Perineal MRSA Infections among Toddlers

Version: 1 Date: 25 April 2011

Reviewer: Kristina Hulten

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Major Compulsory revisions:

1. Background p 3 second paragraph: Several reports show the migration of USA300 into hospital settings, why the claim about molecular differences between CA and HA strains are not true (anymore). Rephrase.
2. Material and methods: For what antibiotics were susceptibilities obtained? CLSI guidelines? Please provide more information.
3. How many of the children had underlying conditions overall? Or, how many children had no underlying conditions?
4. There are several studies referring to infections in children with underlying conditions using epidemiological definitions such as community onset health care associated (CO-HCA) or healthcare associated community onset (HACO) because children with underlying conditions are likely to be more frequently exposed to the healthcare system. Antibiotic resistance to, for example, clindamycin has been greater for isolates from these infections. (There is no clindamycin resistance in this present study. Is clindamycin used for the treatment of pediatric CA-MRSA infections at this hospital?) Authors could expand on this and should make sure to compare to studies where underlying conditions are reported.
5. There is no statistical analysis even to compare results between age groups. Thus, the conclusion is not supported. Authors should add statistical analysis.

Minor essential revisions:

1. ACME, pvl should be spelled out in abstract. I could not find anywhere in the manuscript where pvl was completely described using the correct gene name (lukSF-PV) or referring to the protein made. What was the rationale to choose the specific set of genes analyzed by PCR? Why was not cap8 included, for example?
2. A further discussion on Diversilab rep-PCR vs. PFGE could be added. Was there a greater discrimination between strains using the PFGE? Did the authors believe the USA500 designation to a few "USA300" isolates to be incorrect given the fact that these strains were also ACME positive? It is curious that 25% of isolates of a specific USA300 subtype were cap5 negative. Was this followed up using primers targeting other segments of cap5? Did they have another cap?
3. Table 2. Add percentages
4. Figure 3 can be deleted

**Level of interest:** An article of insufficient interest to warrant publication in a scientific/medical journal

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare I have no competing interests in the field. EXCEPT, I do perform research on pediatric S. aureus infections.