Reviewer's report

Title: Analysis of S.epidermidis icaA and icaD genes by polymerase chain reaction and slime production: a case control study

Version: 2 Date: 8 February 2013

Reviewer: Tsai-Ling Lauderdale

Reviewer's report:

In general, the question posed by the authors is well defined, the methods are appropriate, and the data are OK for the most part. However, the writing is still not acceptable, which reduce the value of the manuscript. Some statements in Results and Discussion need to be clarified to improve coherency.

Major Compulsory Revisions

INTRODUCTION
1. L88 reference 7 (Gatermann SG et al., 2007 ) is on macrolide resistance, not investigation of the ica locus. Do the authors mean reference 17?

MATERIALS & METHODS
2. What is the length of study? At L90 is “12-month” and at L118 is “15 month
3. L200: “PCR was performed on the 82 S. epidermidis isolates from infection associated with catheters, Typical results are shown in the Figure 2″ Since not all 82 isolates were from catheter associated infections, this should be corrected. Also, change the second part to “Examples of PCR results are shown in Figure 2″.

RESULTS
4. Again, PCR detection is not ‘expression”, so
   - Table 1 footnote, change “expression” to “the presence”.
   - L204. “and it was also demonstrated that icaD had higher expression rate than icaA…” Change “expression” to “positive”
   - Also at L260-261 in Discussion, PCR positive does not mean “higher rate of expression”
5. L194-197: The sentence should be separated into two, one for Table 1 data and the other for Table 2 data. At L196-197, do the authors mean to say “All 15 slime producing S. epidermidis isolates were positive for both icaA and icaD (Table 2)”.
6. L194-197 should also be moved to “PCR detection” section instead of under SEM.

DISCUSSION
7. L227. Please explain how the finding from this study is similar to reference 3, which was a study on RsbU.
8. L 252-254. "In other respects involves the second stage of biofilm formation has demonstrates that cell aggregation and biofilm accumulation by some genes, ...........", what is this sentence trying to say?

9. L 263. “The present study has shown the lack of icaC in some isolates”? How? Also, “what does “mapped in the entire operon” refer to? Please rewrite to clarify.

Minor issues not for publication but must be corrected
This manuscript should be carefully edited by a professional editor. Below are some examples this reviewer found.

1. Keywords: “scanning electron microscopic” should be “scanning electron microscopy”

2. L 87-88: “In the recent years, many studies to investigate the mechanisms of the ica locus is a marker of S. epidermidis obtained from nosocomial infections related to implanted medical devices” suggest changing to “In recent years, several studies have been conducted to investigate the ica locus as a marker of S. epidermidis obtained from nosocomial infections related to implanted medical devices”


5. For S. epidermidis, there needs to be a space between the genus and species. “S.epidermidis” can still be found throughout the manuscript including the title.

6. IRB approval was stated twice, once at L 104-106 and again at L 128-130.

7. L 211. “It has now be found” should be “It has now been found”

8. L 235-237 “In addition, we conjecture that the virulence factor of S. epidermidis will be weak” is stated twice.

9. Line 246 “fetal infection”, “fetal” should be “fatal”

10. Reference formats are inconsistent throughout. Some start with initials of first names of authors instead of last name, some list full first and last names. It is messy.

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.

Declaration of competing interests:
I declare that I have no competing interests.