Reviewer's report

Title: Procalcitonin is not sufficiently reliable to be the sole marker of neonatal sepsis of nosocomial origin

Version: 2 Date: 26 February 2006

Reviewer: Greg Hodge

Reviewer's report:

General

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)

The authors have investigated the use of serum procalcitonin as a sole marker of neonatal sepsis of nosocomial origin. The study is well conceived and well written. The rapid identification of nosocomial infections in newborns is problematic and to date no single laboratory test has proven adequately sensitive or specific. Although the present study shows that use of procalcitonin is not sufficiently reliable to be the sole marker of nosocomial neonatal sepsis, the results show it is at least as sensitive as any other single diagnostic test and should be part of a sepsis screening workup for any suspect patient. The major drawback of the use of procalcitonin as a stand alone test is in the detection of sepsis of coag negative organisms which the authors have identified. The current study suffers from the limitations of other investigations of neonatal sepsis in that there is no sufficiently reliable internationally acceptable gold standard. The real value of this test will be identified when international concensus definition is identified and comparison of procalcitonin with other sensitive markers such as specific inflammatory cytokines and leucocyte surface markers are undertaken.

What next?: Accept without revision

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare I have no competing interests.