Reviewer's report

Title: Epidemiology of acute kidney injury in Hungarian intensive care units: a multicenter, prospective, observational study

Version: 1 Date: 7 March 2011

Reviewer: zaccaria ricci

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Medve and coworkers conducted a 60 days epidemiologic study on AKI in 7 Hungarian ICUs. The authors utilized AKIN criteria to diagnose AKI.

The methodology of this epidemiological study is interesting because it was conducted (as far as they claim) for the first time in Hungary and because the authors utilized AKIN criteria for their research: their results are finally directly comparable to those of other centers/nations.

The major concern of this study is that, from the epidemiological stand point, their sample size (and observational time) is relatively small. Furthermore, the derived information may be of some interest for Hungarian healthcare, since it looks like the data reported from the authors substantially confirm a good quality of care, in line with currently reported in multinational observations (as also punctually discussed by the authors). Nevertheless, they do not add significant insights to the readers. In my opinion a good point to make the article original, might be to identify some critical points of Hungarian AKI treatment strategy and to directly compare them to some other "reference" AKIN data (i.e. Joannidis M, et al Acute kidney injury in critically ill patients classified by AKIN versus RIFLE using the SAPS 3 database. Intensive Care Med. 2009 Oct;35(10):1692-702) analyzing and discussing where they do better and where they do worse, eventually explaining why.

Minor

The authors must present the mortality data for AKI and non AKI patients: as is this section lacks clarity.

The authors should report p values of their main findings in the results section text.

The authors state that “Any degree of AKI was associated with a significantly increased all-cause ICU and hospital mortality compared with not having AKI” but in table 4 the in-hospital mortality difference between AKI and non AKI patients appeared non significant: please specify better. As far as I understand, the patients with AKI that survived ICU are 112-44= 68; of these 11 died after the ICU. On the other side 347 without AKI had an ICU mortality of 77 patients: these 270 survivors had an in-hospital mortality of 34 pts: all these informations must be specified with related “%’s and “p’’s!

I understand the the sample size is relatively small, but it would add much interest to know (or actually, to have the confirmation that) AKI is an independent
risk for mortality in a multivariate analysis (the authors did collect a lot of data not
to do this kind of analysis!).

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests