Reviewer’s report

Title: Characteristics of febrile urinary tract infections in older male adults

Version: 0 Date: 03 Aug 2019

Reviewer: Arturo Artero

Reviewer's report:

This an observational study aimed at knowing the clinical and microbiological characteristics of febrile urinary tract infections (FUTI) in elderly males. The authors conclude that elderly males had an increased frequency of HCA-FUTI, higher Charlson scores, received previous antimicrobial treatment more frequently and had less mictional symptoms. Elders also showed a lower frequency of FUTI caused by E. coli and a higher rate of infections caused by antibiotic resistant microorganisms. However, neither MDRO nor in-hospital mortality were associated with elderly males by multivariate analysis.

The following comments should be addressed:

- Methods:

The authors classify the study as cross-sectional, but patients are followed until they are discharged from the hospital or death in order to determine the length of hospital stay and in-hospital mortality. In my opinion this is a longitudinal study (cohort study).

The authors say that FUTI was defined as an armpit temperature > 38ºC, but It should be specified at what time the temperature was recorded. How can you explain that the mean temperature was 37.7ºC if the minimum temperature for the inclusion of a case in the studio was 38ºC?

I suggest adding the definitions of pyelonephritis and acute prostatitis and include the cases of pyelonephritis and prostatitis in Table 1. I also suggest specifying the criteria used for the diagnosis of BPH.

Why did you exclude polymicrobial urine cultures with two microorganisms? I think you have lost a significant number of cases with Enterococcus spp. which are an important cause of inadequate empirical antimicrobial therapy.

- Results:

Pag 11, line 14 Replace Pseudomonas aeruginosa by Pseudomonas aeruginosa.

The authors found that multivariate analysis crude in-hospital mortality was independently associated with chronic kidney failure, cirrhosis, severe sepsis or septic shock and IEAT but not with being an elderly male. However, the small number of deaths (n=15) makes a multivariate analysis with such a large number of variables inappropriate. I suggest eliminating the multivariate analysis of the study and therefore also Table 4.

- Discussion

I suggest shortening the discussion.

The long duration of antibiotic therapy in the study (mean 16.3 days) should have been discussed.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

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