

Author's response to reviews

Title: Prospective study of urinary tract infection surveillance after kidney transplantation

Authors:

Roberto Ribera-Sanchez (cerdea321@yahoo.com.mx)
Dolores Delgado-Ochoa (lolgera@hotmail.com)
Ramon Espinoza-Hernández (espinohdzt2003@yahoo.com.mx)
Rocio Flores-Paz (rflorespaz@yahoo.com.mx)
Elvia García-Jiménez (elviagen@yahoo.com.mx)
Andres Bazan-Burges (bazandr@hotmail.com)
Myriam Arriaga-Alba (arriaga_alba@yahoo.com)

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Author's response to reviews: see over

May 21st, 2010.

Rikiki Graham, PhD.
Rachel Neilan, MSc.
BMC series-Journals.
Floor 6, 236 Gray's Inn Road
London, WC1X 8HL

The present is to inform that we are gratefully for your comment about our paper; "Prospective study of urinary tract infection surveillance after kidney transplantation" MS1833292702285714". We are sending the corrected version on word version 2003. We are including a version on which the changes done can be observed remarked on color (2010 BMC Transplant.doc). The other version is the same document with the changes accepted. (BMC CHANGES ACCEPTED.doc).

Within the present letter, we are now including a point by point description of the realized changes requested by reviewer 2.

Within the manuscript we are including a letter of the ethical committee of Hospital Juárez de México. This research project started when it have obtained a registration number of the vignette research committee. This acceptance letter is on the Hospital archives with the number HJM-236/97.

The study did not implicate any invasive procedure for the patients. It consisted on performing urinary cultures, which are also recommended for medical control or patients after this surgery. Patients were informed orally and its voluntary participation to continue this studies after hospitalising days was required, as part of its post-surgical I medical surveillance.

Yours faithfully:

Myriam Arriaga-Alba PhD.

ANSWER TO REVIEWER 2-

1.- The reviewer commented: Their discussion should be softened in any way to show that these are just their opinions.- In order to softened the conclusions, the second paragraph of discussion has been modified.

Original paragraph...

This may be because the cadaver donor had an asymptomatic infection, which developed in the immunosuppressed patient; in contrast, live donors are evaluated carefully before surgery. Similar results have been observed by Midtvedt et al [24], who reported that deceased kidney recipients had higher rates of infections. In the present study, female sex was found to be a risk factor for UTI, as reported previously [4].

It has been modified by:

In the present study, we found that patients who received a deceased graft were more susceptible to UTI, compared with a graft from a living related donor (70% vs. 28%). This may be **perhaps** because the cadaver donor had an asymptomatic infection, which developed in the immunosuppressed patient; in contrast, live donors are evaluated carefully before surgery. Similar results have been **previously** observed by Midtvedt et al [24], who reported that deceased kidney recipients had higher rates of infections. In the present study, female sex was found to be a risk factor for UTI, as reported previously [4].

2.- The reviewer comment that:

The speculation on the cost-benefit of urinary cultures is in stark contrast with this study... is not designed to answer to this question. Would urge the authors to add a small comment to address this.,--

Attending the reviewer comment, a small phrase has been included on the last paragraph of page 9, in order to remark the benefit of performing urinary cultures after kidney transplantation

The paragraph....

The cost–benefit of urinary cultures has been questioned, especially in asymptomatic UTI in kidney transplant patients [28].

Has been modified by:

The cost–benefit of urinary cultures has been questioned, especially in asymptomatic UTI in kidney transplant patients [28]. **Meanwhile it should be advisable to have more studies to evaluate the advantages of performing those cultures in all post transplant patients for UTI surveillance.**

3.- The reviewer suggested that The authors should add a comment in order to remark that the abuse of antibiotics inside and outside of medicine is resulting on antibiotic resistant microorganisms. ..

The paragraph. ...

Antibiograms in these patients are useful to reduce employment of antibiotic therapy on unnecessary cases and to improve antibiotic therapy on kidney transplanted patients. Twenty-two percent of our isolates were resistant to ciprofloxacin, which is used widely in kidney transplant patients, although this was lower than the 50% resistance reported by Senger et al. in 2007 [3]. In the present study, ampicillin resistance was observed in 33% of the Gram-negative strains. The main therapeutic options were aztreonam, trimethoprim–sulfamethoxazole, netilmicin and fosfomycin. Cephalosporin showed intermediate resistance in our study, whereas, Lazinzka et al [29] reported that 90% of Gram-negative strains isolated from kidney transplant patients in Poland were susceptible to ceftriaxone and ceftazidime. These results might explain the failure of the employed prophylaxis in patients developing UTI. Performing an individual antibiogram gave a good therapeutic alternative to patients who presented with UTI after receiving a kidney allograft.

Has been modified by....

In contrast, it has been reported that multiresistant bacteria might be cultured from kidney transplant patients as a consequence of prophylactic therapy, therefore antibiograms of the infecting microorganisms have been suggested [1,3,16]. Antibiograms were performed for infective bacteria in our study, in order to offer more appropriate therapy to patients. Antibiograms in these patients are useful to reduce employment of antibiotic therapy on unnecessary cases and to improve antibiotic therapy on kidney transplanted patients. Twenty-two percent of our isolates were resistant to ciprofloxacin, which is used widely in kidney transplant patients, although this was lower than the 50% resistance reported by Senger et al. in 2007 [3]. In the present study, ampicillin resistance was observed in 33% of the Gram-negative strains. The main therapeutic options were aztreonam, trimethoprim–sulfamethoxazole, netilmicin and fosfomycin. Cephalosporin showed intermediate resistance in our study, whereas, Lazinzka et al [29] reported that 90% of Gram-negative strains isolated from kidney transplant patients in Poland were susceptible to ceftriaxone and ceftazidime. These results might explain the failure of the employed prophylaxis in patients developing UTI. **In fact, it is known that antibiotic resistance is a frequent medical problem due to the extra-medical and medical abuse of these drugs,** but an individual antibiogram **seems that on this study** gave a good therapeutic alternative to patients who presented with UTI after receiving a kidney allograft.

3B.- On the new version this point has also been remarked on the Abstract section conclusions, in order to improve the concordance among abstract and conclusions section.

The last paragraph of the abstract section has been changed from.-

Conclusions

Surveillance of UTI for the first 3 months is a good option for improving quality of life of kidney transplantation patients and the exit of graft function especially for female patients and those receiving deceased grafts.

To the new paragraph:

Conclusions

Surveillance of UTI for the first 3 months is a good option for improving quality of life of kidney transplantation patients and the exit of graft function especially for female patients and those receiving deceased grafts. **Antibiograms gave a good therapeutic alternative to patients who presented with UTI after receiving a kidney allograft.**

4. - A Conclusions paragraph has been included after discussion as the editor has recommended:

Conclusions

Surveillance of UTI for the first 3 months is a good option for improving graft function free of kidney infections and quality of life for kidney transplant population and the exit of graft function especially for female patients and those receiving suspicious deceased grafts. Antibiograms gave a good therapeutic alternative to patients who presented with UTI after receiving a kidney allograft.

5.- The Competing interests paragraph.

The authors status that any of us have any competing interest. Not financial neither commercial.

Has been changed, to improve redaction, by the following new paragraph:.

Competing interests. – **All the authors confirm that do not have any competing interest neither financial retribution nor commercial compromises in this work investigation.**