Author's response to reviews

Title: Emphysematous cystitis following a transrectal needle guided biopsy of the prostate

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Version: 5 Date: 3 September 2012

Author's response to reviews: see over
Reviewer's report:
Reviewer 1

1. This case reports add little to the literature. It is another case report of emphysematous cystitis and numerous cases have been reported. The authors do not really relay the key message in the discussion that emphysematous cystitis in the absence of risk factors is indeed rare. However this topic has recently been reviewed in detail. This paper does not attempt to review the previous literature and determine whether similar invasive procedures can be a significant risk factor for development of EC in apparently immunocompetent patients.

Thank you for your comments. We have revised the paper according to your comments and added references where necessary. We have deleted the sentence, “In addition to diabetes mellitus, emphysematous cystitis has been associated with chronic urinary tract infection and neurogenic bladder,” and instead, we have added the following sentences in the text, page 5 line 6, and included reference 3:

“EC is a relatively uncommon condition. Of the cases of EC, 60% are associated with diabetes mellitus\(^\text{1,2}\). Kelesidis et al.\(^\text{3}\) reported that EC was commonly observed in patients who had either diabetes or other immunosuppressive diseases. Moreover, they reported that the other risk factors were old age, female sex, urinary tract outlet obstruction, structural abnormalities of the bladder, chronic urinary tract infection, hemorrhagic cystitis, alcoholic disease.”

2. An addition of a table describing previous EC that development after instrumentation would improve the manuscript.

As pointed out by reviewer 1, adding a table describing previous EC cases would greatly improve the paper. Hence, we have added Table 1 and also added a discussion of the table in the text, page 5 line 16.

“In our recent review of the literature, some of the reported cases of EC developed secondarily from medical interference (Table 1).”
3. Did the patient have good glucose control during hospitalization? This needs to be clarified. Also did he receive steroids during his hospitalization?

During hospitalization, the glucose levels of the patients were well controlled. The highest glucose level recorded was 135 mg/dL. This slight elevation was a result of the response to stress caused by the infection. Most of the glucose levels recorded was within the normal limit. And we did not use any r steroids.

4. Correct typos e.g. fluoroquinilone, cystitis, was generally not prefer

Thank you for bringing this to our attention. We have carefully checked our manuscript for typographical errors.
Reviewer's report:
Reviewer2
1. In the discussion section, the authors stated only 150 cases of EC had ever been reported in the English literature. EC is rare alright, but maybe not so rare (as an urologist, I have seen several cases of EC in my practice). The authors may consider either put it as a rare condition (delete the number) or provide references for that statement.

Thank for your advice. EC is common among patients with diabetes mellitus; however, only a few cases of EC associated with medical interventions have been reported. We have added Table 1 to illustrate this.

We have deleted the sentence, “EC is a relatively uncommon rare condition, will only 150 cases reported in the English literature.” Instead, we have added the following sentences:

page 3 line 4

“The disease is most common among middle-aged diabetic women and is relatively rare in patients who do not have immunosuppressive disease.”

page 5 line 6

“EC is a relatively uncommon condition. Of the cases of EC, 60% are associated with diabetes mellitus.\(^1,2\)"

In addition, we have inserted Table 1 and a discussion of the table on page 5 line 16.

“In our recent review of the literature, some of the reported cases of EC developed secondarily from medical intervention (Table 1).”

2. In the conclusion section, the authors mentioned the cause of this EC case might be due to the prostate biopsy or the stress associated with the gastric surgery. The causes of the EC cases might better be deal with in the discussion section, instead of the conclusion.

Thank for your helpful comments. As you recommended, it is indeed necessary to discuss
the causes of EC. We have added the following sentences in the Discussion section and inserted reference 4.

“In the present case, EC developed secondarily after major surgery and prostate biopsy. Kimura et al.\(^4\) reported that surgical and traumatic injuries profoundly affect innate and adaptive immune responses and that a significant suppression in cell-mediated immunity after an excessive inflammatory response appears to be responsible for the increased susceptibility to subsequent sepsis. This report indicates that the immune system of the patient treated weakens with surgery, in a similar manner observed in immunosuppressive disease.”

Reference 4

3. There are several wrong use of terms and spelling mistakes in the text that needs to be corrected by professional editing.

Thank for bringing this to our attention. We have carefully checked our manuscript for typographical errors.