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Changes to manuscript

Response to reviewer comments 1

- Some studies also show that elderly patients are generally less likely than younger patients to receive analgesia due to multiple factors including depression, failures in memories and cognitive deficits than may hinder obtaining an accurate pain history. They may be experiencing similar pain as younger patients however may not be able to express it accurately.

- We defined emergency surgery as those who had undergone surgery within 48hrs of admission to the hospital through the Emergency Department for an acute presentation. We limited the study to strangulated hernia, gangrenous or perforated viscus using ICD codes as these were the conditions that required immediate surgery upon diagnosis (unlike some cases of intestinal obstruction). Other conditions such as cholecystitis can also be managed conservatively.

- We defined patients to have major morbidity when they had a complication Clavien-Dindo Grade 3 and above either requiring surgical intervention or high dependency/ICU supportive care.

- IBM SPSS statistics ver 20.2

- There has also been an increase in operations performed for patients older than 65 years old, which is generally accepted as baseline age for geriatric surgery [13].

Response to reviewer comments 2

“This is a retrospective study for evaluating time delay of operation for abdominal emergency in elderly (over 65 years old) patients. Results suggested that there was no correlation between delay on surgery and mortality. However, postoperative complication rate was higher in cases operated more than 24 hours after onset.

Although cases analyzed were small in number, the result they presented is reasonable. I have several minor comments regarding this paper as follows. 1. IBM SPSS ver 2.0. seems to be a very old version. I think it may be version 20. 2. Please give us the reasons why taking CT scan need such a long time. If patients had abdominal symptoms at the arrival of ED, CT scan would be taken ASAP.”

- Delays in performing CT scans in the former group could be attributed to several reasons namely hemodynamically unstable patients requiring further resuscitation and even transferring to high dependency or ICU first, delayed presentation of illness, lack of physical signs at first presentation, inability to illicit proper history from uncommunicative or cognitively impaired patients, and also patients who are found to have acute kidney injury at the first instance requiring rehydration before performing a contrast CT scan. The breakdown of the time attributed to the aforementioned factors were not the focus of this particular study but could be looked into with greater detail in subsequent studies.

Response to reviewer comments 3

“Dr. Ong et al. reported clinical outcomes in the elderly patients who came to ER in the single center. They reviewed morbidity and mortality of the 144 patients and tried to identify clinical factors to predict poor clinical outcomes. Overall manuscript is well written, but the tables are hard to understand. In the Table 2, total 34 patients supposed to have surgical reoperations. However, total morbidity was 20 patients. What is this discrepancy? In addition, unplanned return to OR is also difficult to understand. How many planned patients did return to OR? In the Table 3, stratification of the group in the text was 1-6hrs, 7-12hrs, 13-24hrs, and more than 24hrs. The morbidity was decreased by 24 hrs and then increased, wasn't it? You should discuss this in the text. I would like you to ask mentioning brief summary of the Charlson's comorbidity index in the methods.”

- In table 2, a total of 9 patients had to return to operating theatre for surgical intervention. To account for the other 11 patients with Clavien Dindo Grade 3 and above complications, we included those who required HD/ICU supportive care and those who passed away but did not undergo surgical reintervention.

- According to Table 3, we noticed that the overall morbidity seemed to initially decrease with time when surgery was performed within 24hrs. However beyond 24hrs, it was noted there was the highest percentage of patients with Clavien 3 and above complications (7 out of 18 patients, 38.9%). This bimodal representation could possibly be explained by there being 2 groups of patients: the first group where patients were more stable and diagnosis was made early with resultant earlier operation performed and the second group where patients were more unstable and required a period of resuscitation first before undergoing an operation. In the latter group, patients were generally hemodynamically less stable and required a period of resuscitation before performing a CT scan to confirm diagnosis. This resulted in delayed diagnosis and hence a delay in surgery. The 25 patients who eventually underwent surgery after 24hrs were mostly patients already in severe sepsis and this could have explained the majority of them ending up with greater complications post-operatively.

-To elucidate possible predisposing factors for surgical delay, we looked at the patients' comorbidities based on the Charlson's weighted comorbidity index. This index is widely used in the geriatric population giving different weights to different comorbidities [11]. It was first used to predict lifespan but subsequently had been found to be useful to predict risk of surgery in the geriatric population [12].