Author’s response to reviews

Title: Emergency inguinal hernioplasties in a Tertiary Public Hospital in Athens Greece, during the Economic Crisis

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Author’s response to reviews:

On the comments of the Reviewer 2 (as understood)

- The repetition of the word “inguinal” in the keywords has been omitted.

- The comment regarding the difference on the mean patient age has been addressed in both our previous responses. Although a 67-years old patient cannot be considered “young”, he is “younger” to the 71-years old, and the difference in the mean age of the two cohorts was found to be statistically significant. As such, we believe that it has to be reported.

- The term “postoperative time” does not exist in the manuscript. This ambiguity has been clarified in our first revision and eliminated in the second revision. These changes have been highlighted in our responses to the reviewers. The only term used is “Length of Hospital Stay” which by definition is the time/days spent in the hospital by the patient.

- As it can be seen in the previous revised versions of our manuscript the tables have been modified, named and explained in the manuscript-text in the Results section.

- As we discuss in the corresponding session of our manuscript (page 12 lines 17-21) and the responses to the reviewers as well, a cost analysis with the available data would have been highly susceptible to bias. Given also that such an analysis is beyond the abilities of
the authors as we clearly state (page 12 line 9-11), we regret that we cannot fulfil the reviewer’s expectation which was our expectation too.

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- The aim of the authors was to investigate possible differences between two periods of time regarding emergency hernioplasties. We had to provide the correct frame for analysis. Thus we offered some limited information on the total hernioplasty workload. This becomes apparent by comparing the amount of data offered in Table 1 and Table 2. Table 1, which concerns all hernioplasties, offers no information apart from the necessary 1) to underscore the disproportionate changes on the emergency and elective workload 2) to call attention to the increase of regional anesthesia in all hernioplasties regardless of the emergency or elective setting and 3) to clarify the impact of the refugee crisis. In contrast Table 2, which focuses on the manuscript’s topic, i.e. emergency hernioplasties, is considerably larger providing additional information such as the length of stay, the need for ICU, the cost of treatment etc. It would have been very easy for us to omit the word “emergency” from the title and provide a more general one as suggested by the reviewer, but in this way we would have misinformed the potential reader who would seek information not provided and not discussed in the manuscript.

- We thank the reviewer for noticing our oversight. He is absolutely right on the lack of definition of emergency hernioplasty. We corrected this mistake by adding this definition in both the abstract and the manuscript-text itself (page 5, line 25).

- We too, together with the reviewer, were surprised by seeing that our small cohort could lead to statistical significance in some variables although the differences were small. However these are our data and we believe we have to report them.

- We didn’t claim that an urgent hernioplasty is associated with regional anesthesia. In contrast, and as reported in Table 1 and in the Results section (page 7, line 7) regional anesthesia was more frequent in all hernioplasties of the second period. This is appropriately discussed in the relevant section. Nevertheless, the choice of anesthesia was left to the anesthesiologist’s preference and this information, that was missing indeed, has been added to the Materials and Methods section of the manuscript (Page 6, lines 5-6).

- We cannot see the data inconsistency in the second paragraph of page 7 and the corresponding Table. In lines 16-17 we clearly state that the patients with intestinal ischemia (reversible or not) of the second period had a longer hospital-stay. In the next sentence we report on the subgroup of patients who needed intestinal resection who had a similar hospital-stay in both periods. These are two different subgroups with different hospital stay and we have to distinguish between.
The years 2010 and 2011 were intentionally not included. Information and rumors on the impending economic crisis existed in 2009, the first economic and austerity measures were implemented in 2010 and austerity was intensified in 2011. As a result these 2 years can be considered as a transitional period with all the changes not being readily apparent. To obtain a “clear cut” alteration we compared a “well before the crisis” period to a period “with the crisis well established”. We fully agree with reviewer that this information was missing, we added this clarification to the Materials and Methods section (page5, line 19) and we thank him for pointing this out.

As we present in the Results section and in the Tables none of our patients needed ICU postoperatively in the period before the crisis. In contrast, during the crisis 4 patients had to be admitted to the ICU postoperatively. We consider this change as an increase of the need for ICU-hospitalization and we cannot see why this is a conclusion impossible to draw. Similarly, the percentage of the migrants-refugees operated on as an emergency prior to the crisis was 3.5% of the total cohort of the emergency treated patients (7 out of 195). During the crisis this percentage became 5.8% (14 patients out of 241). Although we clearly state that this is a non-statistically significant change (Chi square p=0.2) it still remains an increase (the number of the patients doubled). On the other hand, none of the patients with intestinal ischemia was a migrant or refugee in both periods. On the same time all the patients with intestinal ischemia were Greek in both periods. We can therefore conclude that ischemia was a matter for the Greeks only. This is in line with the general impression we discuss that during the crisis the Greeks altered their attitude. Affected by the financial constraints, they acted as if they neglected their health problems. This is discussed in the 6th paragraph of the relevant manuscript section. In contrast, the refugees presented a different attitude and behavior, addressed the hospital earlier and avoided resection.

The reviewer is right in that the total number of patients in both periods remained constant. Indeed, elective hernioplasties decreased and emergency hernioplasties increased. This is the outcome of two phenomena acting in parallel. One is the avoidance of having a hernia repaired electively, and the other one is bypassing of small district hospitals. Each phenomenon isolated from the other cannot explain our data. If only avoidance of district hospitals existed, which means that our fellow-citizens had their hernia promptly repaired, then our number of elective hernioplasties would have increased or at least remained stable. This scenario is negated by our data and the decrease of our elective workload. On the other hand if our fellow citizens neglected prompt treatment and addressed equally central and district hospitals on an emergency basis only, then our elective workload would decrease and our emergency workload would increase in proportion. We would expect an increase of 6-12 emergency patients.
for the observed decrease of 60 elective patients (~15% of the decrease). This is far less to the 46 emergency patients we admitted, implying that our catching population has increased. We believe that the changes we detected are the outcome of the joint effect of both behaviors: avoidance of prompt repair and bypassing small hospitals. Separating one of the two behaviors from the other cannot explain our data and, on the other hand, we see no alternative explanation for what we evidenced.

- We fully agree with the reviewer that small district hospitals must have been in position to treat a strangulated hernia. We did not argue that these hospitals are inadequate. What we claimed is that they were by-passed by the population after the reports appearing in the media (Page 9, line 24). Some examples of such reports and the atmosphere created are given in a list of links further below. We are not in position, and it is beyond our scope, to verify the truthfulness of the mass-media reports. However, as they were readily accessible, they surely affected the trust of the population on district hospitals. We never implied through our manuscript that small hospitals needed support in their competency regarding emergency hernioplasty, nor we said that lack of support to small hospitals was responsible for the increase of the incidence of ischemia as the reviewer claims. What we expressed is that the by-passing phenomenon would have been of smaller size and the distribution of the workload across the Greek NHS would have been more reasonable by supporting small hospitals to maintain their good reputation for the service provided. (page 10 lines 4-7 and the last sentence of the manuscript)

Links to reports regarding the effect of crisis on the Greek public hospitals that appeared on the web, newspapers, radio and TV (unfortunately all of them are in Greek). This only a small sample and not an exhaustive list but it is sufficient to give an impression of their potential impact on the psychology of the population and the ambiance created this way.


