

Peer Review File

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Reviewer A:

Comment: The present study reviewed the current status of thoracic surgery in Egypt. Overall, the study is well performed, however, there are potential limitations in this study. First, why are approximately 5% of tuberculosis patients still in need for surgical intervention? It is higher rate compared to other countries. Lung tuberculosis is a stigmatized disease however, it is possible to treat administered medication. Is the risk of multi-drug-resistant tuberculosis infection high in Egypt? Please mention the detail. Second, the procedure of CT screening in patients with suspected COVID-19 was not described. The author should show the detail. I would like to recommend the minor revisions for this manuscript. Hopefully, lung transplantation and Robotic surgery would spread throughout the Middle East in the foreseeable future.

Reply: Thank you so much for your recommendation, so happy that you liked our manuscript. Approximately 5% of tuberculosis patients are still in need for surgical intervention, this was derived from references number 43 and 44 representing international publications not local figures. Although we don't have the exact number of TB cases that underwent surgery in all centers in Egypt, but this percentage represents the average number of cases in most centers in Egypt. The procedure of CT screening in patients with suspected COVID-19 was not official screening, it was a self-guided screening due to the unavailability of PCR in some places and the cheap and readily available CT scan in most centers. We described this on page 21 line 454.

Reviewer B:

It is my pleasure to review this article. The authors pointed out the current status of thoracic surgery with historical review and promising future in Egypt.

I think this paper has worth to be distributed to dedicated surgeons in thoracic surgery fields, but several concerns are listed as follows:

Comment 1. Keywords are not suggested in abstract session.

Reply 1. Thank you for your suggestion, keywords were added on the submission as requested by the online submission system "VATS, thoracic surgery, chest, Egypt, lung neoplasm, cancer, tuberculosis "

Comment 2. On page 6, from line 135~152, these paragraphs could be edited into "current situation" section from "Health care system" section.

Reply 2. Thank you, those paragraphs are under the subheading of "current situation".

Comment 3: Table or graph about increasing numbers of thoracic surgeons/surgery types can be added to figure out currently changing status of workload in Egypt.

Reply 3: Thank you for your suggestion, unfortunately we do not have exact numbers of previous workload or number of surgeries before to compare to the recent situation.

Comment 4: The impact of COVID-19 situations and increasing CT screening is thought to be worth to be focused in this article.

Reply 4: Thank you, a separate section for COVID-19 and its impact on thoracic surgery can be found now on page 21 line 454.

Comment 5. Figure 4 and 5 shows interesting cases. But, some figures can be replaced, such as newly adopting techniques, junior surgeons/training program or cover of domestic journals, representing future perspectives for thoracic surgery in Egypt.

Reply 5. Thank you for your valuable comment, we have added new photos on our recent practice and training program.

Reviewer C:

Comment: This is a review article on how thoracic surgery is practised nowadays in Egypt. The paper describes the actual practice of thoracic surgery in a middle income country from EMEA with a historical perspective. It is well written and interesting to some point, even if it is sometimes superficial. However, I don't think this subject will be of interest to the reader of JTD.

Rely: Thank you so much for your recommendation, this manuscript is an invited article as part of a special issue about "thoracic surgery worldwide", we try to share our current situation and practice to be part of the global thoracic surgery effort and we hope that it will be of an interest to the JTD readership.

Reviewer D:

Comment: This is a well written and structured review article. The bibliography is well selected and synthesizes the object of the review well, showing a synthetic and easy global perspective for the reader on Thoracic surgery in Egypt.

Rely: Thank you so much for your recommendation, so happy that you like our manuscript.

Reviewer E:

Comment 1: I admire and applaud the authors for writing a manuscript that covers the broad and profound topic of thoracic surgery in Egypt. Conceptually and in the details as they have to do specifically with Egypt will be of interest to the readers. My biggest issue with this manuscript has to do with the fact that it is too long. Its length can

be nearly halved with some reorganization and the inclusion of detail that pertains to Egypt specifically and the exclusion of details and statements that are too general. I have tried to highlight some of these issues below but ask that the authors re-read and re-structure their presentation to account for my general suggestion above as well as to the specific points below.

One point of clarity that is needed is whether they are talking about cardiac or general thoracic surgery from the onset. They use “thoracic” in their title and in several countries this implies cardiothoracic where in others it may mean general thoracic. The focus of their manuscript seems heavy on the general thoracic but does include some detail on the cardiac aspects. They should have a title and a central thesis that addresses this issue.

Reply 1: Thank you for your valuable suggestion, we have added the term “General” to the “thoracic surgery” in abstract section to demonstrate that we talk specifically on thoracic surgery not cardiothoracic surgery.

Comment 2: On page 3, the History section is satisfactory. They should perhaps consider dividing this long paragraph into 2 or 3 for ease of reading and renaming this section an “Overview of the History”. On page 4, line 81, they start describing specific details about TB and then later on line 93, they describe specific details about Trauma. Rather than leave them here, I believe these paragraphs are better suited as openings to their respective sections on TB and Trauma that they later present. Part of moving these areas to later have to do with the fact that a lot of what they have included in these specific sections are general statements about disease processes that may or may not pertain to Egypt specifically. Therefore moving the above-mentioned text to these areas provides for a richer read. They can then move the paragraph that begins on line 103 to follow their current opening paragraph, although they can re-structure the end of this paragraph to be restructured to be more about general thoracic surgery rather than VATS.

Reply 2: Thank you for your valuable suggestion, we have removed the paragraph concerning the history of TB to the corresponding section of TB. However, regarding the other parts in history about trauma and VATS, we feel that it is attached to the history section more than the corresponding section to tell the whole story of advancement in the field, so we left it as it is.

Comment 3: In their section on the Health care system that begins on line 119, I would argue should be split into different sections or preceded by a different section. More specifically, there needs to be a description about the “Education of Cardiothoracic and Thoracic Surgery in Egypt” or something of that nature before. This educa-

tion piece would flow nicely following the history as it their current history speaks to how their pioneer surgeons obtained their training. In this education section they could: 1) use the majority of the sentiment from lines 135-143 as a second paragraph; 2) take the majority of the sentiments from lines 333-349 as well as 356-359 and use this as the first paragraph of an education section; and 3) include lines 144-147 as the third paragraph. In doing so, the readers will then understand their difference between a cardiothoracic and thoracic surgeon as it is not clear. Then they can follow this “education” section with the “healthcare” section that includes the sentences from lines 120-134. I do not believe that lines 148-152 add much to their message, in general. However, they should spin this part to make a call for the need for more thoracic or cardiothoracic surgeons. The section on the “Current situation and workload” then follows well.

Reply 3. Thank you so much for your valuable suggestions, we made an education section and added paragraphs as you suggested.

Comment 4: There are many general statements that are included in their manuscript that are statement of facts that describe the overall state of cardiothoracic or thoracic surgery, but many of these do not tie in well to the state of cardiothoracic surgery or thoracic surgery in Egypt specifically. Weaving these themes better into their text would enhance the delivery of their message.

The following are examples:

In the section on “Lung cancer surgery in Egypt” lines 191-192 is a general statement most know. Lines 193-194 are obvious statements. Lines 197-204 are general statements as well. Only lines 204-207 have Egyptian specific points. They need to essentially make lines 191-204 much shorter, efficient, and pertinent to Egypt

Reply 4: Thank you, we shortened this part as you requested. We tried not to make it all very concentrated on local practice as other reviewer mentioned that manuscript is very domestic

Comment 5: Lines 214-217 is a general statement. Can the authors conceive of a way in which to make MDT multimodal approach more available? Answering this question makes this discussion more relevant to Egypt.

Reply 5: Thank you, we emphasized the importance of integration of GPs and the new module of deep learning might help make MDT more available, besides the fact that we hope this article to urge the health authorities in Egypt to pay more attention to

that topic.

Comment 6: Lines 218-221 are unnecessary as most clinicians know the benefits of MDT. Additionally, lines 221-223 is conceptually an ideal goal, but again the question of how they suggest achieving this goal remains unclear and answering it would make the discussion more relevant. Lines 222-233 seem to be broad brush stroke statements and it is not clear how these specifically pertain to the Egyptian system. Many of the issues highlighted pertain to other systems internationally. They may want to shorten this section or eliminate it.

Reply 6: Thank you so much We have shortened that part as requested.

Comment 7: In the section on the “Burden of Tuberculosis in Egypt” are the sentences in lines 250-251 and lines 253-254 general statements or do they apply to Egypt specifically as well? Similarly in lines 255-258, it seems like these surgical methods listed are applicable to all centers around the world and not necessarily unique to Egypt? Do they have Egypt specific data such as a preferred Egyptian approach? Lines 262-264 are not needed as they are general statements.

Reply 7: Thank you. We rearranged this section after adding the history of TB in Egypt and focused on the current practice and types of surgeries.

Comment 8: In the section on “The burden of foreign body inhalation”, lines 267-269 are again general facts. Starting this section with what is specific to Egypt is more compelling. Lines 279-283 are unnecessary as these are general statements that do not specifically apply to Egypt. The paragraph that begins on line 284-294 is an excellent example of how the information is relevant to their country. On the other hand, lines 295-299 is not needed as these are nonspecific statements.

Reply 8: Thank you so much for your valuable suggestion, we just tried not to be too domestic as noted by other reviewers so we have kept some general statements to help in comparing the situation in Egypt to that in other parts of the world for those who are not expert in the field

Comment 9: In the section on “Chest trauma in Egypt” the sentence that begins on the end of line 312 and ends on 314 is not needed.

Reply 9: Thank you. We have removed it

Comment 10: In the section “Future prospective and challenges”, how do lines 430-436 actually pertain to Egypt? These sentences are just general observations that do not distinguish Egypt. Lines 444-448 as well as lines 466-468, similarly are just general statements that do not need add much value to their discussion.

Reply 10: Thank you so much for your valuable suggestion, we just tried not to be too domestic as noted by other reviewers, so we have kept some general statements to

help in comparing the situation in Egypt to that in other parts of the world for those who are not expert in the field

Comment 11: Thematically, one question that arises is if they have such a great system to manage TB, why could they not translate this system to facilitate lung cancer screening and management? It seems as though they would have the infrastructure.

Reply 11: Thank you, very intelligent notice, the TB program in Egypt was once funded by the WHO and has been getting huge support from the health authorities for decades now. We tried to attract attention to the current problem of lung cancer in Egypt, which is less appreciated by the health authorities, as the numbers are underestimated. That is why we try to compare our situation with that of the others and try to acknowledge the efforts done in TB campaign.

Comment 12: In the section where they discuss “Academic thoracic surgery” I would recommend that they specify what the official cardiothoracic society is and then state that “The Cardiothoracic Surgeon” is the affiliated journal. Also in this section, as mentioned above, they should take elements of this section and make a new “education” section earlier.

Reply 12: Thank you for your valuable suggestion. We have added description for the society and figure of the cover of *The Cardiothoracic Surgeon* journal.

Comment 13: Lines 350-355 do not make any sense. Please rewrite this paragraph. Also, lines 360-381 have more to do with VATS than “Academic thoracic surgery”. I would recommend that they create a separate section that discusses “Advances in cardiothoracic (or thoracic) surgery in Egypt” and move this section to that section particularly before they discuss specific disease process or immediately after. Additionally they should abbreviate this text. Later in their text, lines 455-465 could be included in this potentially new section.

Reply 13: Thank you for your suggestion. We have removed paragraph 350-355

Comment 14: I certainly appreciate the value of discussing COVID-19, but I would recommend that they remove this part for two reasons. First, by the time this manuscript is published hopefully COVID-19 will be a lesser important topic. Second and perhaps more important, they could expand on this topic and make it a separate paper unto itself and specifically as it has to do with how Egypt handled this matter. The only part of this section that may be relevant to their topic could be the role of ECMO. They could include this portion in the “Advances in cardiothoracic (or thoracic) surgery in Egypt” section. Likewise, lines 471-475 should be considered in a section that discusses advances or future considerations (see below).

Reply 14: Thank you so much, by the time we are revising this manuscript, we are witnessing the 4th wave of COVID-19 here in Egypt and it looks like this pandemic will not come to an end soon and even after it is gone, we think that its impact is worth mentioning in our article as it affects our practice much and for a long time. We have a separate manuscript published in the journal of our society” The Cardiothoracic Surgeon” with more in depth discussion of the triage and precautions during the pandemic and we have cited it in this manuscript.

Comment 15: The title of their section “Future prospective and challenges” should have the word “prospective” changed to “perspective”. In this section, lines 426-428 there are many surgeons who never believed in the “glory” of cardiac surgery but rather found it a profession where they were slaves to the cardiologists. I would recommend rephrasing this sentence.

Reply 15: Thank you We have modified it to perspective as advised. In the country of origin of Sir Magdy Yacoub, high school students join medical school to be like him, cardiac surgeons. So, the glory of cardiac surgery in Egypt is a real thing whether we like it or not.

Comment 16: Lines 437-442 as well as elsewhere in their manuscript, the authors return to the theme of creating a national database. Rather than raise this issue periodically, they should consider outlining some type of framework of how this database should be developed or only mention it once.

Reply 16: Thank you. We have removed this paragraph.

Comment 17: In general, their entire “Future prospective and challenges” reads as a rambling preamble to their conclusion. They should strongly consider placing elements of this section elsewhere and then just abbreviating it to true future goals and plans.

Reply 17: Thank you. We have rearranged this section

Comment 18: Overall, this manuscript needs to be made more efficient in the delivery of its message as it has the potential to be an interesting paper to read in print.

Reply 18: Thank you so much for all your valuable comments and suggestions and hope you will like manuscript after revision.

Reviewer F:

The authors submitted their manuscript untitled: “Thoracic surgery in Egypt”.

I appreciated reading this article. As a European, it gave me the opportunity to have an in-depth review of Egyptian Thoracic surgery past and current situation.

I have a few comments listed below:

Comment 1: A careful proofreading should be conducted, as there are several typos in the text. Also acronyms and abbreviations should be defined prior to their application.

Reply 1: Thank you for your suggestion. We have conducted an English-language proofreading

Comment 2: I recommend adding a section about the Egyptian Society of Cardiothoracic Surgery. Either at the end of the History section, or in the Academic thoracic surgery section.

Reply 2: Thank you. A section about the history of the society and the journal were added as advised

Review G:

Comment: This paper traces the history of thoracic surgery in Egypt and describes the field, problems, and future prospects.

In addition, it was very interesting to read about the unusual phenomenon that the detection of early-stage lung cancer is increasing in the COVID-19 era

If the editorial board can tolerate this completely domestic contents, I think it is well worth publishing in this journal.

Reply: Thank you so much for your recommendation, so happy that you like our manuscript. This manuscript is an invited article as part of a special issue about “thoracic surgery worldwide”, we are trying to share our current situation and practice to be part of the global thoracic surgery effort and we hope that it will be of an interest to the JTD readership.

Reviewer H:

Comment 1: Title. Consider revising to: Past and present of thoracic surgery in Egypt

Reply 1: Thank you, as this is an invited article, we have used the title as asked by the editor

Comment 2: Needs English language corrections throughout the entire manuscript.

Reply 2: Thank you for your nice suggestion. We have conducted an English-language proofreading

Comment 3: Line 192: International guidelines recommended surgical resection as a treatment of choice in 192 approximately 30% of patients with stage I-II non-small

cell lung cancer. I feel the percentage should be much higher. Surgical resection remains the mainstay for localized lung CA.

Reply 3: Thank you. We have removed this percentage and rephrased the paragraph.

Comment 4: Table 1: it is unclear what numbers represent. What is 8 and 7.2 is Age columns?

Reply 4: Thank you, 8 and 7.2 is the Age Standardized Incidence Rate and Age Standardized Mortality Rate per 100,000 as mentioned in the GLOBOCAN 2020: New Global Cancer Data. UICC. 2020. <https://www.uicc.org/news/globocan-2020-new-global-cancer-data>. Accessed 4/9/2021 2021.

Comment 5: Can authors comment on percentage of surgeons performing complete LN dissection in cases of lung CA.

Reply 5: Thank you so much for this question. Unfortunately, we do not have data regarding this point

Reviewer I:

Comment: The authors described thoracic surgery in Egypt where history, epidemiology, and current status and future direction of thoracic surgery.

The manuscript is well-written and self-explanatory.

I think this review article is worth for publication.

Reply: Thank you so much for your recommendation. So happy that you like our manuscript.