

Peer Review File

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Reviewer A

This article is fascinating in highlighting the importance of occult pneumothorax in blunt chest trauma. The study could help identify and resolve dangerous moments with traumatic pneumothorax in treating trauma patients. However, there are some questions and suggestions that the authors may wish to address.

Comment 1: Professional English proofreading is necessary.

Reply: We proofread my thesis again in English.

Comment 2: Line 56-57

What is the subject of "Frequency of occurrence and subsequent treatment."

Reply: We marked occult pneumothorax as a clear subject. (see Page 3, line 62-63)

Changes in the text: However, the precise data on the frequency and subsequent treatment of traumatic occult pneumothorax is currently limited and under investigation.

Comment 3: Line 96-97

Does this phrase mean all patients are diagnosed with the same lung contusion, rib fracture, pneumothorax, subcutaneous emphysema, and pneumomediastinum?

Reply: we added the diagnostic method and final diagnosis confirmation process of all patients' radiological studies. (see Page 4, line 85-90)

Changes in the text: One out of three thoracic surgeons with Trauma specialty immediately confirmed CXR at the patient's ER visit, and at Trauma rounding the next day, two of thoracic surgeons and one radiologist checked the images together and made a diagnosis. Figure 1. shows the numerous radiographic findings of occult pneumothorax in supine CXR and chest CT.

Comment 4: Line 137

Insert the reference at "supine CXR has low diagnostic sensitivity."

Reply: We added Reference No 2. (see Page 10, line 227-229)

Changes in the text: Rowan KR, Kirkpatrick AW, Liu D, Forkheim KE, Mayo JR, Nicolaou S. Traumatic pneumothorax detection with thoracic US: correlation with chest radiography and CT--initial experience. *Radiology*. 2002;225(1):210-4.

Comment 5: Insert the reference number (10)

Reply: We added Reference No 12. (see Page 10, line 249-251)

Changes in the text: Ball CG, Ranson K, Dente CJ, Feliciano DV, Laupland KB, Dyer D, et al. Clinical predictors of occult pneumothoraces in severely injured blunt polytrauma patients: A prospective observational study. *Injury*. 2009;40(1):44-7.

Comment 6: Line 161-164

Shouldn't the phrase "1184 patients without pneumothorax on CXR" be changed to this "among 1184 patients without pneumothorax on CXR"?

Reply: We correct the sentence according to the reviewer's comment. (see Page 7, line 177-178)

Changes in the text: Also, among 1184 patients without pneumothorax on CXR

Reviewer B

I read your manuscript. I think this manuscript is well-described. I have a question.

Comment 1: What is the relationship between the side of the pneumothorax and chest contusion or subcutaneous emphysema?

Reply: According to the findings of this study, if the parietal pleura ruptures due to rib fracture, it can lacerate the visceral pleura of the lung, leading to the accumulation of air in the thoracic cavity. The air in the thoracic cavity then passes through the injured parietal pleura, resulting in subcutaneous emphysema. Additionally, severe lung injury caused by inertial deceleration appears as lung contusion on a supine CXR and causes air leakage from the lung parenchyma. All these findings observed on a supine CXR strongly indicate the presence of OP.

Comment 2: If you can't do the chest CT then, how to insert the chest tube to the pneumothorax side of the lung?

Reply: According to the recent ATLS guideline, bilateral decompression or bilateral chest tube insertion is recommended for blunt trauma patients with unresponsive vital signs or impending arrest. CT may not be performed for any reason, even if it is not an emergency. Alternatively, even before performing CT, if lung contusion, subcutaneous emphysema, and rib fracture are present in supine CXR, OP should be considered and chest tube insertion appropriate to the situation. Chest tube insertion is thought to be the most important decision of the clinical situation and attending physician.

Comment 3: The only way to detect the OP is to take a chest CT, right? If so, what is the aim of this study?

Reply: As stated in the definition, occult pneumothorax is a diagnosis that is confirmed through CT scanning. In other words, in trauma patients, OP refers to traumatic pneumothorax, and based on the findings observed in supine CXR, traumatic pneumothorax can be reasonably suspected. Hence, for the purpose of this study, supine CXR findings may provide sufficient grounds to suspect traumatic pneumothorax, enabling physicians to consider assisting in chest tube insertion even before conducting a CT scan if necessary.

Comment 4: You don't mention the chest ultrasonography to detect pneumothorax in the ER.

Reply: The effectiveness of chest ultrasonography was added in Discussion. (see Page 7, line 172-176)

Changes in the text: Recently, ultrasound has been widely used in trauma patients, with reported sensitivity of 92-100% for pneumothorax diagnosis. However, there may be rare cases where ultrasound cannot be used for any situation of emergency room. And although using ultrasound, the presence of subcutaneous emphysema can limit the field of view, making it challenging to diagnose pneumothorax using ultrasound. Paradoxically, subcutaneous emphysema can be considered an overt predictor of pneumothorax.

Reviewer C

Comment 1: The author insisted that it might be difficult to move the patients under the critical vital signs for receiving CT scan. I agree with this opinion.

However, in that situation, ultrasound sonography can be another alternative procedure to detect OP. Lung sonography is already known as a reliable technique in the evaluation of various thoracic diseases. One important, well-established application is the diagnosis of a pneumothorax. Sonographic signs, including 'lung sliding', 'B-lines' or 'comet tail artifacts', 'A-lines', and 'the lung point sign' can help in the diagnosis of a pneumothorax.

Therefore, the author should describe the usefulness of supine chest X-ray by comparing it with ultrasound sonography in the discussion section.

Reply: We Commented on the usefulness of supine CXR compared to ultrasound in Discussion. (see Page 7, line 172-176)

Changes in the text: Recently, ultrasound has been widely used in trauma patients, with reported sensitivity of 92-100% for pneumothorax diagnosis. However, there may be rare cases where ultrasound cannot be used for any situation of emergency room. And although using ultrasound, the presence of subcutaneous emphysema can limit the field of view, making it challenging to diagnose pneumothorax using ultrasound. Paradoxically, subcutaneous emphysema can be considered an overt predictor of pneumothorax.

Comment 2: The author demonstrated the odds ratios in several types of thoracic injuries. Although it was reasonable, it was already known, and many trauma doctors usually care about OP. I totally recommend that the author construct the scoring system to detect OP using the results, which is considered very useful and objective.

Reply: I totally agree with the reviewer. However, it is thought that the scoring system to detect OP will be possible only when more systematic research and more data are gathered. About this, we talked about the discussion. (see Page 7, line 163-166)

Changes in the text: Further research is needed to develop an improved diagnostic method for occult pneumothorax, potentially utilizing a scoring system or artificial intelligence analysis of supine chest X-rays. This research should consider factors such as the quantity of rib fractures, lung contusion, and subcutaneous emphysema.

Reviewer D

Comment: It is a well written paper about the relationship between occult pneumothorax and supine X-ray. However, I wonder whether this paper has a new impact or not because the patients with blunt chest trauma often would take chest CT even if their vital signs are bad, especially after their vital signs get better.

Do the authors always insert a chest drain if patients have these findings? Or do you take chest CT for the time being?

Reply: As mentioned by the reviewer, this study may be considered outdated due to the recent advancements in resuscitation techniques and the availability of rapid CT scans. However, it is important that not all hospitals and medical systems have access to the latest technology, and this study is providing a minimum hints for patient care. Currently, our institution's strategy

does not involve performing chest tube insertion unconditionally, unless the patient is experiencing respiratory distress or impending respiratory arrest, even if risk factors for occult pneumothorax (OP) are visible on the CXR. This approach has been supported by our recent data, where delayed chest tube insertion was performed in less than 10% of OP cases. However, CT scans are typically conducted to assess all potential underlying trauma injuries.

Reviewer E

Comment 1: In the Introduction part, it is unclear why the authors performed the study despite of previous studies on the same topic. I guess that they performed this study because the sample sizes of the previous studies were relatively small.

Reply: I totally agree with reviewer's comment. Although there may not be a big difference in some parts from previous studies, I think it can give more reliability and present a point of view in the treatment of blunt trauma patients in the emergency room.

Comment 2: The way making diagnosis from images is important in a radiological study. First, number and characteristics of researchers engaging in interpretation of images should be described. Whether the interpreting team consisted of multiple regular members and whether it included board-certified radiologists may be associated with consistency and quality of diagnosis. Second, it is better to mention the mechanism of obtaining consensus among members. I guess that there were some disagreements in diagnosis.

Reply: The reviewer's opinion is very important.

However, it is not thought that there are many hospitals around the world where most emergency medicine and trauma surgeons are always provided with professional radiology opinions 24 hours a day in mid-to-low developed country. Thus, in order to help treat patients in 24-hour emergency situations, it is important to have a CXR diagnosis made by a trauma surgeon with qualifications and a thoracic surgeon. This study can give some basis for helping this qualification.

The three of thoracic surgeons among authors are who are qualified in trauma surgery licence and work as attending physicians in trauma center. The radiological diagnosis in this paper was based on the diagnosis of a attending trauma specialist(also thoracic surgeon) at the time of visit the ER, and the diagnosis was confirmed on trauma rounding at the next day with two other thoracic surgeons and one radiologist.

Comment 3: It is unclear why three statistical softwares were used in this study. A study usually uses a single software.

Reply: Most statistics were conducted with SPSS.

However, the contents of statistical analysis requested by professors of the department of biostatistics, and professors of urology who are proficient in statistics were the verification of the overall analysis and the accuracy, sensitivity, specificity, PPV, and NPV shown in the supplementary appendix.

At this time, SAS and R were used, and although there is no big difference, each statistical author used a professional program, so it is indicated in the paper.

Comment 4: According to the reference #9, female sex is independent predictor of OPTX. I

wonder why this matter was not described in lines 137-139. In addition, the reason why the authors of the current study excluded female sex from univariate and multivariate analysis is unclear.

Reply: Of course, reference 11 said that SQ emphysema, lung contusion, rib fractures, and female sex were risk factors. In this regard, it has been said that breast tissue can alter the judgment of CXR and give less trauma in smaller women (same traumatic force is more damaging to a smaller female frame). However, this may also be due to racial differences between Canada (study country of reference 11) and Asia, average height and BMI, and may be sufficiently different due to limitations of retrospective study. Although data are not shown in this study, there was no difference in OPX between women and men, so gender was not mentioned in the discussion to reduce interpretation confounders. In addition, unlike the characteristics seen in some cancer or some specific disease, the authors had no reason to mention differences in risk factor due to gender differences in trauma unless there is clear evidence.

Comment 5: The difference in results between this study and previous ones and the source of the difference should be mentioned in the Discussion part. Discussion on these matters enhances value of this article.

Reply: As the reviewer said, the differences from previous studies and the areas identified in this study were mentioned in the Discussion.

Comment 6: In lines 149-151, the association between parietal pleura and lung contusion is unclear. I think that lung contusion does not directly cause rupture of parietal pleura.

Reply: We edited a paragraph according to the reviewer's opinion.

This is because the findings of lung damage and laceration due to inertial deceleration look like contusion on chest X-ray. (see Page 7, line 158-163)

Changes in the text: According to the findings of this study, if the parietal pleura ruptures due to rib fracture, it can lacerate the visceral pleura of the lung, leading to the accumulation of air in the thoracic cavity. The air in the thoracic cavity then passes through the injured parietal pleura, resulting in subcutaneous emphysema. Additionally, severe lung injury caused by inertial deceleration appears as lung contusion on a supine CXR and causes air leakage from the lung parenchyma. All these findings observed on a supine CXR strongly indicate the presence of OP.

Comment 7: All the data obtained in the study should be described in the Result part. Data in lines 159-164 should be written in the Result part.

Reply: As the reviewer said, it would have been nice if these results were tabulated, but this study was a study to compare chest CXR and chest CT, identify risk factors, and analyze them to diagnose Occult pneumothorax. Compared to the conclusion, this content is simply the ratio of subcutaneous emphysema and pneumothorax, so this results were mentioned in the discussion for the importance of subcutaneous emphysema in supine CXR. Therefore, this content was not marked separately to have the unity of the thesis when drawing conclusions in the research results section. Thanks for the reviewer's advice.

Comment 8: The authors wrote in line 169, “most findings that were not visible on CXR did not appear on CT.” I’m afraid that this is incorrect because negative predictive values were low as shown in Table S1. I think this sentence should be changed to “most findings that were not visible on CT did not appear on CXR”. It will fit the context because specificity is discussed in the preceding sentence.

Reply: we edited according to the reviewer's comment. (see Page 8, line 188-190)

Changes in the text: The specificity of CXR in detecting thoracic trauma was confirmed to be almost 100% in all chest trauma diagnoses. In other words, most findings that were not visible on CT did not appear on CXR.

Comment 9: I think that “Assult” in Table 1 should be changed to “Assault”.

Reply: We edited according to the reviewer's comment.

Changes in the text: Table 1.

Reviewer F

Comment 1: In multivariate analysis, why do you exclude pneumomediastinum that showed high positive predictive value? Please clarify the method of multivariate analysis in Methods section.

Reply: Pneumomediastinum had a higher positive predictive value on chest X-ray compare than other blunt chest trauma injury. And this diagnosis not excluded from multivariate analysis. However, it showed no significant p-value and odd ratios for occult pneumothorax associated factor on supine CXR in both univariate and multivariate analysis results. In other words, the diagnosis of pneumomediastinum had a high positive predictive value in supine CXR related to chest CT, but no statistical indicators were found as a risk factor for OP. Table 4 shows only significant results as a risk factor for OP. Further explanation of the multivariate analysis method was given in Methods. (see Page 5, line 97-99)

Changes in the text: A univariate analysis, factors that would have affected pneumothorax were analyzed, and in multivariate analysis, factors that affected were analyzed and significant results were presented in a table.

Comment 2: I understood that the number of patients of OP was 683. Please specify that in Results.

Reply: As the reviewer said, I added that the number of patients of OP was 683. (see Page 5, line 97-99)

Changes in the text: The total number of occult pneumothorax cases was 683.

Comment 3: The first, second, and third paragraphs in Discussion is redundant. Some of them should be integrated in Introduction.

Reply: We integrated up duplicate content. (see Page 6, line 134-151)

Changes in the text: Discussion Paragraph 1 ~ 2.

Comment 4: In line151, each factor: rib fracture or lung contusion, and subcutaneous emphysema, does not show OP in 100%. The last sentence “it indicates the presence of

pneumothorax” is not correct.

Reply: We edited according to the reviewer's comment. (see Page 7, line 161-163)

Changes in the text: Additionally, severe lung injury caused by inertial deceleration appears as lung contusion on a supine CXR and causes air leakage from the lung parenchyma. All these findings observed on a supine CXR strongly indicate the presence of OP.

Comment 5: I am confused by the description in line 159 “261 out of 270 patients (96.7%) with subcutaneous emphysema on CXR were diagnosed with pneumothorax on CT” that is not consistent with 52 patients with positive subcutaneous without OP in Table 3.

Reply: We've confused you in result explanation. The explanation on line 179 is talking about the total number of pneumothorax patients, not OP. In table 3, only Occult pneumothorax is indicated, and all case numbers are correct.

Comment 6: The description in limitation of Discussion in line 180 “the included pneumothorax cases in this study may not be indicative of critically ill patients” is not consistent with the description in Conclusions “if CT cannot be performed right away due to unstable vital signs.” To conclude those, please analyze the factor of unstable vital signs.

Reply: We commented the description of unstable V/S in discussion and limitations. The patients were excluded those whose BP was in shock, and whose resuscitation was not responded in this study. Since, the analysis was performed excluding critically unstable V/S patients, the phrase ‘right away due to unstable vital signs or another circumstance’ was deleted from the conclusion. (see Page 8, line 201-204)

Changes in the text: Lastly, in cases where vital signs remained unstable despite vigorous resuscitation, these patients were unable to undergo a chest CT scan due to the immediate need for a procedure or operation. Therefore, the included pneumothorax cases in this study may not be representative of critically injured patients.

Comment 7: Please show the percentage of patients in Table 3.

Reply: We edited according to the reviewer's comment.

Changes in the text: Table 3.

Comment 8: I strongly recommend that the authors ask for a professional English editing service before submitting a paper.

Reply: We proofread my thesis again in English.

Reviewer G

I read the article "Occult Pneumothorax in Patients with Blunt Chest Trauma: Key Findings on Supine Chest X-ray." on the usefulness of supine chest radiography in the polytrauma patient. Although it is a topic of considerable interest, and the case history of your study is remarkable, the interpretability of the results is complicated and unclear.

Comment 1: The risk of post-traumatic occult pneumothorax has prompted emergency medicine to organize robust early and noninvasive diagnostic pathways, among which The E-FAST ultrasounds approach stands out.

Nowadays, in emergency/emergency departments, it is difficult not to have clinicians unable to verify the absence of pleural sliding on chest ultrasound examinations. This obviates the need for radiographic examination and pushes for a direct, in-depth CT chest.

Your paper loses interest and integrability in modern care pathways without referencing the protocol you use in your institution to manage chest trauma. You should add concerns and comments in the M&Ms and the discussion.

Reply: In the discussion, the contents of ultrasound were explained more fully. (see Page 7, line 169-176)

Changes in the text: The increased use of CT scans and chest ultrasounds in the investigation of thoracoabdominal blunt trauma results in the detection of pneumothorax, which cannot be diagnosed using traditional supine CXR(2, 13, 14)). In polytrauma patients, initial evaluation is often performed with focused assessment with sonography for trauma (FAST). Recently, ultrasound has been widely used in trauma patients, with reported sensitivity of 92-100% for pneumothorax diagnosis. However, there may be rare cases where ultrasound cannot be used for any situation of emergency room. And although using ultrasound, the presence of subcutaneous emphysema can limit the field of view, making it challenging to diagnose pneumothorax using ultrasound. Paradoxically, subcutaneous emphysema can be considered an overt predictor of pneumothorax.

Comment 2: Regarding identifying radiological signs found to be significant for OP, I am perplexed by the case of pulmonary contusion. In my experience, it is challenging to confidently describe a parenchyma contusion instead of an effusion veil by analyzing a simple supine chest X-ray exam. In addition, it must be considered how many different radiological manifestations of pulmonary contusion and different grades there are. You should improve and argue this aspect, clarifying how you thought to reduce the interpretative bias of the radiographic examination.

Reply: On duty day, one of the three thoracic surgeons always attended and checked the patient's CXR in the trauma center. The next day, there is a trauma conference where two thoracic surgeons and one radiologist review the patient radiologic study, where the findings from the chest X-ray are finally confirmed. And although reviewer's concern, most diagnosis of CXR was consistent in most of these doctors' procedures. We diagnosed differently lung contusion and hemothorax via radiologic finding. Hazziness of lung contusion is not restricted by the anatomical boundaries of the lobes, or segments of the lung. And geographic, non-segmental areas of ground-glass densities were typical. However, hemothorax is diffuse

haziness on entire hemithorax on CXR.

Comment 3: Many typos and unclear sentences have been underlined in the text as the file attached.

Reply: We corrected where reviewer indicated.

Reviewer H

I would like to thank the handling editor for offering me the opportunity to review the manuscript titled "Occult pneumothorax in patients with blunt chest trauma: key findings on supine chest x-ray" authored by Choi et al., which is under consideration for publication in the Journal of Thoracic Disease. I would also like to commend the authors for their work, which represents a single-centre, retrospective study that aimed to evaluate the frequency and risk factors for occult pneumothorax in trauma patients. The study included 1284 adult patients who suffered blunt thoracic trauma and subsequently underwent chest radiograph and computed tomography (CT) at the Christian Hospital of the Wonju Severance in the Republic of Korea between 2015 and 2022. The images were classified into five radiographic diagnoses: pneumothorax, rib fracture, subcutaneous emphysema, lung contusion, and pneumomediastinum. The results showed that the accuracy and sensitivity of pneumothorax diagnosis on supine chest radiograph were 46.7% and 12.7%, respectively. The multivariate analysis identified lung contusion and subcutaneous emphysema on supine chest radiograph as the risk factors for occult pneumothorax. Therefore, the authors conclude that, if chest CT cannot be performed immediately due to unstable vital signs or other circumstances, recognizing the above radiographic findings may be important for the diagnosis of traumatic occult pneumothorax. The study provides valuable information on the limitations of supine chest radiograph in detecting traumatic pneumothorax and identifies risk factors for occult pneumothorax that can aid in early detection and treatment.

Overall, the manuscript is well-structured. The introduction sets the appropriate background even for the reader with little knowledge on the subject matter. The methodology is appropriate for the analysis, and the results are clearly presented with appropriate tables. The findings are discussed within the context of the pertinent literature, and the conclusions drawn are clinically relevant. Strengths of this manuscript include, but are not limited to, its large sample size and its focus on a significant topic in trauma care. Limitations of the study, as discussed by the authors, include its retrospective and single-centre nature, which may introduce bias into the findings.

The following commentary includes certain suggestions that, in my opinion, could enhance the overall quality of the manuscript:

Comment 1: In the Abstract, it would be beneficial to include the odds ratios with 95% confidence intervals and P-values for the variables identified as important in the multivariate analysis (i.e., lung contusion and subcutaneous emphysema).

Reply: We edited according to the reviewer's comment. (see Page 2, line 42-44)

Changes in the text: In multivariate analysis, the risk factors for OP were lung contusion

P=0.005 [odds ratio (OR) 1.440 (95% CI 1.115–1.860)] and subcutaneous emphysema P=0.000 [OR 25.883 (95% CI 13.155–50.928)] on supine CXR.

Comment 2: Line 44: The authors may consider replacing the phrase “clinical signs” with “radiological findings” or similar.

Reply: We edited according to the reviewer's comment. (see Page 2, line 49)

Changes in the text: Therefore, if chest CT cannot be performed immediately due to unstable vital signs or other circumstances, recognizing the above radiological findings of traumatic pneumothorax may be necessary.

Comment 3: At the end of the Introduction, it would be helpful to specify the reporting checklist followed, as per the Journal's guidelines.

Reply: We edited according to the reviewer's comment. (see Page 4, line 74-75)

Changes in the text: We present this article in accordance with the STARD reporting checklist (available at <https://jtd.amegorgups.com/article/view/...>).

Comment 4: It would be useful to clarify if the imaging studies were re-reviewed or if the authors relied on the original reports and also to comment on the level of experience of the radiologists who performed the reports.

Reply: We added explanation about radiologic review in Methods. On duty, one of the three cardiothoracic surgeons always checked ER visit patients in the trauma center. The next day, through a trauma conference, there is another process of reviewing the patient by two thoracic surgeons and one radiologist, and here the findings from the CXR are finally confirmed. (see Page 4, line 87-89)

Changes in the text: One out of three thoracic surgeons with Trauma specialty immediately confirmed CXR at the patient's ER visit, and at Trauma rounding the next day, two of thoracic surgeons and one radiologist checked the images together and made a diagnosis.

Comment 5: The approval number from the local ethics committee or institutional review board should be included in the Methods.

Reply: We edited according to the reviewer's comment. (see Page 4, line 92-93)

Changes in the text: The study acquired institutional approval (NO.: CR322100) from the ethics review boards at Wonju Severance Christian Hospital.

Comment 6: The authors could conduct a more comprehensive review of the existing literature on the topic and provide more context for their study.

Reply: As the reviewer said, the discussion and reference were reinforced.

Comment 7: The authors could further discuss the implications of the findings for future research and its potential impact on the development of new treatments and diagnostic tools for patients with thoracic trauma.

Reply: There is a mention of the content in discussion, but there are limitations in using it as a new diagnostic method of CXR due to the recent use of ultrasound or CT. However, it may be meaningful to provide CXR data to help diagnosis with radiologic scoring system, or to diagnose immediately without the radiologist with the latest AI program. (see Page 7, line 163-

166)

Changes in the text: Further research is needed to develop an improved diagnostic method for occult pneumothorax, potentially utilizing a scoring system or artificial intelligence analysis of supine chest X-rays. This research should consider factors such as the quantity of rib fractures, lung contusion, and subcutaneous emphysema.

Comment 8: In Table 3, it would be more accurate to report the exact P-values instead of $P < 0.05$.

Reply: The table has been modified according to the reviewer's comments.

Changes in the text: Table 3.

Comment 9: In lines 115-118 and in Table 4, it would be more appropriate to report P-values as < 0.001 instead of 0.000.

Reply: The table has been modified according to the reviewer's comments. (see Page 6, line 127-131)

Changes in the text: Table 4.

Changes in the text: In multivariate analysis, the risk factors for OP were lung contusion $P=0.005$ [odds ratio (OR) 1.440 (95% CI 1.115–1.860)] and subcutaneous emphysema $P<0.001$ [OR 25.883 (95% CI 13.155–50.928)] on CXR which were expressed in Table 4. Furthermore, there was no risk factor in the low AIS group, but as expressed in Table 4, in the high AIS group, rib fracture was $P=0.002$ [OR 1.544 (95% CI 1.173–2.033)] and lung contusion was $P=0.001$ [OR 1.580 (95% CI 1.208–2.066)], with subcutaneous emphysema $P<0.001$ [OR 24.930 (95% CI 12.612–49.282)].

Comment 10: Images that represent the cases included in the study could be provided.

Reply: We added a typical figure of occult pneumothorax. (see Page 4, line 89-90)

Changes in the text: Figure 1.

Reviewer I

Comment : I commend the authors for this excellent job done. I recommend publication of this manuscript as is.

Reply: Thank You for reviewing.