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RE: Manuscript ID: 57463
Dear Editor，

We would like to thank the editor for giving us a chance to resubmit the paper, and also thank the reviewers for giving us constructive suggestions which would help us both in English and in depth to improve the quality of the paper. Here we submit a new version of our manuscript with the title "Aspiration pneumonia during general anesthesia induction after esophagectomy: a case report", which has been modified according to the reviewers' suggestions. Efforts were also made to correct the mistakes and improve the English of the manuscript. We mark all the changes in blue in the revised manuscript.

Sincerely yours,

Jiaxi Tang MD

The following is a point-to-point response to the four reviewers' comments.

Reviewer #1:

Specific Comments:

Reviewer #1: Dear authors, thanks for allowing me to review the manuscript. Little is known about aspiration after intubation and after trauma it is

suggested to perform an RSI to avoid aspiration. It seems that cancer of the gastrointestinal tract decreases the peristaltic and therefore, the digestion. This study is well written and shows the risk even with esophageal atresia. It can be accepted in the current form.

Answer: Thank you for the comments on the paper. Thanks for your affirmation of this article.

Reviewer #2:

Specific Comments:

Reviewer #2: In the discussion "In the present case, we found that the patient had gastric tube dilatation before surgery (Figure 1C), which was consistent with the situation reported in the literature[8]." The situation just after esophageal reconstruction mentioned in literature (8) is different from that of the case reported in this manuscript. In the discussion "Additionally, the use of gastric ultrasound to assess gastric contents before induction may be helpful[20]." The use of ultrasound to assess the content of gastric tube is not effective for this case with reconstruction though retromediastinal route.

Answer: Thank you for the comments on the paper. We have revised the manuscript as suggested since we consider that some sentences or descriptions in the Discussion part are not so accurate based on the literature.

Page 6, line 18-21: In the present case, we found that the patient had gastric tube dilatation before surgery (Figure 1C), which was consistent with the situation reported in the literature[8].

The situation just after esophageal reconstruction mentioned in literature (8) is different from that of the case reported in this manuscript.

Answer: Yes,Your opinions inspired us and we revised the manuscript accordingly. In the revised paper, The sentence "which was consistent with the situation reported in the literature[8]." has been deleted. (Page 8 line 15).

Page 7, line 21-23: Additionally, the use of gastric ultrasound to assess gastric contents before induction may be helpful[20].

The use of ultrasound to assess the content of gastric tube is not effective for this case with reconstruction though retromediastinal route.

Answer: Thank you for reminding us the improper description on the study. We have the improper parts revised accordingly and hope that this new manuscript will be convincing (Page 9 line 6-9).

Reviewer #3:

Specific Comments:

Reviewer #3: This is a case that can give attention to many anesthesiologists when perform anesthesia in a patients after esophagectomy. 1. As an anesthesiologist, I have some questions about anesthesia procedure by the authors. What kind and which size of endobronchial tube was used? How long the surgery did take (Was it sufficiently long to evaluate the effect of the drugs?)? How the responses were after salbutamol, aminophylline, and steroid (parameters such as airway pressure, tidal volume, and end tidal carbon dioxide)? Did the anesthesiologist exchange endobronchial tube into endotracheal single lumen tube? It is important in evaluating airway pressure. I hope these things are described in the case. 2. What are the criteria for gastric tube dilation? If there is a criteria for diameter, it is better to describe it in the CT finding. 3. In the description of the induction position, the reference 11 was a manikin study, so it does not fit the description. It would be good to match other references. 4. In general, the infiltrations of the right lung are more severe. Please describe whether it is the same pattern in aspiration pneumonia after esophagectomy like in this patient and whether the surgical position affected the pattern of pneumonic infiltration. 5. It would be good to recommend practical methods to prevent aspiration in these patients in the conclusion part.

Answer: Thank you for the comments on the paper. We have revised the manuscript as suggested since we consider that our description is not specific, comprehensive and clear enough.

Page 5, line 8-9: and intubated the patient with a endobronchial tube, and ~20 mL yellow–green fluid was withdrawn through the tube.
As an anesthesiologist, I have some questions about anesthesia procedure by the authors. What kind and which size of endobronchial tube was used?

Answer: Thank the reviewer for the comments. We've recognized that this description in the previous copy were not accurate. We have added the

specific catheter model and size, hoping to make the case data more complete and convenient for readers to understand (Page 6 line 15).

Page 5, line 12-15: To manage the high airway pressure, 100 g salbutamol was administered through the endobronchial tube, and 0.125 g aminophylline and 100 mg hydrocortisone were administered intravenously.
How long the surgery did take (Was it sufficiently long to evaluate the effect of the drugs?)? How the responses were after salbutamol, aminophylline, and steroid (parameters such as airway pressure, tidal volume, and end tidal carbon dioxide)? Did the anesthesiologist exchange endobronchial tube into endotracheal single lumen tube?

Answer: Thank the reviewer for the comments. We've recognized that this description in the previous copy were not accurate. We have added the operation time, and then we think 2 hours is enough to evaluate the drug response. The patient's airway pressure dropped significantly after the operation. Considering the risk of reflux, the patient was sent to the ICU with a double-lumen endotracheal tube after the operation, and was not replaced with a single-lumen tube(Page 6 line 24-26).

Page 6, line 18-20: In the present case, we found that the patient had gastric tube dilatation before surgery (Figure 1C),
What are the criteria for gastric tube dilation? If there is a criteria for diameter, it is better to describe it in the CT finding.

Answer: Thank the reviewer for the comments. We've recognized that this description in the previous copy were not accurate. Based on references, we think that the patient's gastric tube has mild dilation, and hope that this new manuscript will be convincing (Page 8 line 15).

Page 7, line 7: aspiration, many anesthesiologists tend to use head-down induction[11].
In the description of the induction position, the reference 11 was a manikin study, so it does not fit the description. It would be good to match other references.

Answer: Thank the reviewer for the comments. We've recognized that this references in the previous copy were not appropriate. We have replaced the references based on the reviewers'comments, and hope that this new manuscript will be convincing(Page 9 line 1).

Page 4, line 20-21: Immediate postoperative chest X-ray showed ill-defined frosted hyaline shadow with exudative lesions in both lungs（Figure 2A）.

In general, the infiltrations of the right lung are more severe. Please describe whether it is the same pattern in aspiration pneumonia after esophagectomy like in this patient and whether the surgical position affected the pattern of pneumonic infiltration.

Answer: Thank you for your reminder. We've recognized that patient imaging data was not fully discussed,and have added a discussion of chest CT results in the discussion section(Page 7 line 26-28;page 8 line 1-2).

Page 2, line 23-25: CONCLUSION: Patients with esophagectomy and gastric esophagoplasty might have a dilated thoracic stomach after surgery. So, anesthesiologists should note that there is a high risk of aspiration pneumonia during the perioperative period.
It would be good to recommend practical methods to prevent aspiration in these patients in the conclusion part.

Answer: Thank you for your reminder. We have realized the incompleteness of the conclusion part, and gave our prevention suggestions based on the current evidence(Page 3 line 21-22).

Reviewer #4:

Specific Comments:

Reviewer #4: After esophageal cancer surgery, anesthesia should be administered with the assumption that reflux is always possible and that the risk of aspiration is high. Depending on the location of the anastomosis, we would usually consider intubation under consciousness because of the anatomical concerns. The preoperative CT shows a strained stomach, so we should be cautious to begin with, and we don't usually ventilate with a mask. I think readers would be interested to know why the authors used mask ventilation and what other reported cases have happened.

Page 5, line 3-4: Mask ventilation was conducted, and the airway pressure was below 20 cmH2O.
After esophageal cancer surgery, anesthesia should be administered with the assumption that reflux is always possible and that the risk of aspiration is high. The preoperative CT shows a strained stomach, so we should be cautious to begin with, and we don't usually ventilate with a mask. I think readers would be interested to know why the authors used mask ventilation and what other reported cases have happened.

Answer: Thank the reviewer for the comments and your suggestion is greatly appreciated. We agree with you, but due to my lack of experience, I did not realize the patient's risk of aspiration is high, and did not notice the patient's strained stomach before surgery. After the patient developed aspiration pneumonia, we reviewed the patient's case data and found that the patient's strained stomach.Also, We searched for two similar articles. The two patients in the two articles still developed aspiration pneumonia despite being given rapid anesthetic induction during the operation (Page 3 line 9-11).