Peer Review File

Article information: https://dx.doi.org/10.21037/vats-23-1

Review comments

Reviewer A

very interesting and useful article

Reply: Thank you for your comment

Reviewer B

I am honored to have an opportunity to review this article describing how to deal with bleeding during uniportal VATS. The reviewer congratulates the authors on their hard work. This manuscript is well written, and has potential to be published. In uniportal VATS, it is surprisingly difficult to reliably apply sealants such as TachoSil during bleeding. It is important to have direct suturing techniques with good use of suction. However, such situations rarely occur, so one should not hesitate conversion to thoracotomy for safety.

Reply: Thank you for your comment

Reviewer C

Thank you for giving me the opportunity to review the manuscript.

In this manuscript, the degree of the bleeding, prevention and preparation for the bleeding, and technique to achieve hemostasis in VATS were precisely described, which were very educational for readers.

I have a concern about the manuscript.

Most parts were applied not only for uVATS but also for mVATS, especially in the section describing the degree of the bleeding and prevention and preparation for the bleeding. I recommend that the author emphasizes the difference between uVATS and mVATS according to them. Compared to those parts, the difference was well mentioned in the part of technique to achieve hemostasis.

Reply: Reviewer 3 is right, in the introducting sections of the manuscript, there is no specific distinction between uVATS and conventional mVATS. The reason is the lack of specific data from uniportal series to address these questions. Most of the tips included in these sections address not only for uVATS but also for mVATS, thus they have been included here.

Reviewer D

I sincerely appreciate the opportunity to review the article "Bleeding control during uniportal VATS without conversion: evidence and technical aspects" submitted by Carlos Galvez and colleagues.

Bleeding during U-VATS, especially from the pulmonary artery, is an important problem, and I believe this paper is very important because it logically explains the causes, assessments, and methods of dealing with this problem.

We would appreciate your consideration of the following points for improvement.

Issues:
1. Video 3 shows bleeding near the root of the middle-lobe pulmonary artery when the clip was applied centrally and then peripherally. The reason may be that a lifting or twisting force was applied. This is an excellent video that summarizes in a short time: (1) compression hemostasis, (2) confirmation of the bleeding point, (3) clamping of the central part, (4) ligation of the central clip with silk thread, and (5) completion of hemostasis. Compared to video 3, the other videos are somewhat half-hearted, i.e., they are not complete videos showing the sequence of (1) bleeding, (2) pressure hemostasis, (3) identification of the bleeding point, (4) selection and implementation of the response method, and (5) completion of hemostasis. If it were possible to edit the videos to include the beginning and end, it would be more educational video. We would appreciate your consideration.
Reply 1: The article includes several short clips that focus on specific tips and tricks while dealing with vascular injury. Different maneuvers have been described and shown in different clips, thus most of them do not include all these steps. If reviewers consider necessary to include it in all the videos we can consider it.

2. Furthermore, are video 3 and video 13 not exactly the same? If they are the same, there may be no need to upload two videos.
Reply 2: Video 13 has been reduced in order to include only the silk ligature of the vessel. (*Video 13 – Silk ligature v2*)

3. Figure 8: "Compression for 5 min." would be less misleading and better than "Compression 5'" since VATS journal is an academic journal.
Reply 3: Figure 8 has been modified to be more clear for academical purposes (*Figure 8 v2)*

4. On Page 4, the second paragraph ends with “table 1”, but I could not find table 1 in the paper for peer review. Please delete it if it is not necessary, or attach it at the time of re-review if necessary.
Reply 4: Table 1 is included in an extra file titled “Tables”. Maybe the authors forget to upload it, but it has been uploaded again

5. Central pulmonary artery taping is very useful not only in cases of severe but also moderate pulmonary artery hemorrhage, so I actively perform central pulmonary artery taping in U-VATS in patients with slightly high bleeding risk. Securing the left pulmonary artery trunk is easy because of its length in the thoracic cavity. On the

other hand, the right main pulmonary artery trunk can be somewhat difficult to secure because of the short distance to the first branch in the thoracic cavity and the anterior location of the right superior pulmonary vein. It would be very educational if the authors could add an explanation and video of securing the main pulmonary artery trunk, especially on the right side. We would appreciate your consideration.
Reply 5: A new video has been added illustrating the dissection and taping of right pulmonary artery as suggested
I wish this paper a higher grade in my review.

Reviewer E

1. This paper contains very important information for VATS surgeons.
2. It was also very well prepared.
3. However, I think that the authors should mention the improvement points for each video to prevent bleeding not only the technique to control bleeding. That kind of comments will help readers prevent bleeding during VATS major lung resection.
Reply: As the causes of bleeding are described in the section titled "Causes of vascular injury", authors think that describing in each video the improvement points for avoiding the bleeding is redundant, but if the reviewers consider it should be added we can include it.

Reviewer F

1. This is a very detailed manuscript on bleeding control. I congratulate the authors. I believe the Introduction section can be completely deleted and convert the incidence of operative bleeding in Introduction.
Reply 1: Introduction section aims to introduce the reader into the content of the paper, including some general aspects regarding the particularities of uniportal VATS. If reviewers prefer to remove this section, we can consider.
2. I personally find it very risky to go from UVATS to thoracotomy directly. It is safe to open a 10mm port (drain site) exclusively for compression, then calmly open. What are your thoughts?
Reply 2: We do agree, opening a 10mm port is an option, but we have a huge experience in uniportal VATS since 2012, and we've never had a problem compressing through the uVATS incision and then converting to open thoracotomy. In fact, we've trained the way to divide the soft tissue retractor in the incision (not only includes plastic but also a metal ring) with shears.

Further review comments

Reviewer D

I appreciate the opportunity to provide a re-review of the article entitled " Bleeding control during uniportal VATS without conversion: evidence and technical aspects". You have generally improved the paper appropriately, but please improve the following points.

#1. Table 1 still does not exist in the PDF for review. Therefore, the review cannot be done for that part. Please add it.
Reply 1: Table 1 was provided in a separate file as mentioned in my responses to reviewers, but I have already added the Table 1 at the end of the Manuscript version 3, attached here in this email.

#2. "A new video has been added illustrating the dissection and taping of the right pulmonary artery as suggested". Is this video 15? I would appreciate it if you could add a video or figure of the easy-to-understand clamping of the main trunk of the right pulmonary artery as I intended in my previous review.
Reply 2: The additional video about right pulmonary artery taping suggested by Reviewer D, is Video 10, and I think describes perfectly in an easy way the step of dissecting, taping and setting tourniquet in right main artery.

I appreciate your cooperation in improving the paper.