

## Peer Review File

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### Reviewer A

**Comment:** This is an interesting, well-written case report.

**Reply:** Thank you for taking the time to review our article and add valuable insight. We hope that our answers and changes meet your standard for publishing.

Aspects of my concern are mainly surgical, i.e.:

**Comment 1:** did you consider performing segmentectomy instead of lobectomy? if so, what were the arguments against it?

**Reply 1:** We did not consider a segmentectomy in this case as we did not want to lose time with the frozen section analysis. Unfortunately, we do not have a pathology lab in our center and the frozen section has to travel by ambulance to another hospital. For this reason, on average we have to wait 40 minutes for a frozen section analysis. We decided to perform a wedge resection and send the lesion for frozen section analysis first while we then continued with the thymectomy. In our center we have recently begun performing sublobar resections for lesions smaller than 2cm, however at the time of the surgery, it was standard procedure to perform a lobectomy for NSCLC of all sizes. The patient was in good general condition and could withstand a lobectomy.

**Changes in the text:** No changes were made in the text.

**Comment 2:** did you use LigaSure for thymectomy?

**Reply 2:** We did not use LigaSure, other electrothermal bipolar-activated devices or ultrasonic systems such as Harmonic. We use a Karl Storz rotating bipolar grasping forcep for dissection and electrocautery, as per our standardised VATS approach. We have found this instrument to be versatile, especially when dissecting vessels and performing lymphadenectomy. Other advantages are that this instrument is reusable and low cost.

**Changes in the text:** No changes were made in the text.

**Comment 3:** what was the overall operative time?

**Reply 3:** The overall operative time was 215 minutes. We added this detail to the case presentation.

**Changes in the text:** The overall operative time was 215 minutes.

**Comment 4:** Additionally, I would recommend you to re-write the Conclusion section. Firstly, the procedure was feasible due to a very accurate patient selection. Secondly, this paragraph should be no longer than 1-2 general sentences.

**Reply 4:** We reduced the conclusion section to 2 general sentences and added that careful patient selection is necessary.

**Changes in the text:** Combined lobectomy and thymectomy for synchronous tumours is a feasible, safe and cost effective procedure if performed by experienced surgeons in a center where VATS surgery is routinely performed and patients are carefully selected. Further studies with a larger population and a controlled follow up are needed in order to assess the

oncological, clinical, surgical and economic outcomes of this approach.

#### **Reviewer B**

**Comment:** This is a report of a case in which left upper lobectomy and thymectomy were performed simultaneously with the left thoracic intercostal approach in the lateral decubitus position.

The thymus is removed before the lobectomy is performed.

**Reply:** Thank you for your valuable review and comments that have improved the quality of our manuscript. We sincerely hope that the changes we made are satisfactory.

**Comment 1:** Was it possible to have a thymectomy without opening the contralateral pleura?

**Reply 1:** We managed to perform the thymectomy without opening the contralateral pleura. We added this detail to the case presentation.

**Changes in the text:** ...we proceeded with the extended thymectomy, without opening the contralateral pleura.

**Comment 2:** If the contralateral pleura opens, and subsequent lobectomy causes pulmonary artery bleeding, there is a risk of inability to ventilate due to blood flowing into the contralateral (right) chest cavity. Even if you do not open the contralateral pleura, it may open unintentionally. Shouldn't we wait for the consequences of frozen section pathology for safety?

**Reply 2:** You are correct, the contralateral pleura is easily opened unintentionally and this could cause problems with contralateral lung ventilation if massive bleeding occurs. Unfortunately, we do not have a pathology lab in our center and the frozen section has to travel by ambulance to another center. For this reason on average we have to wait 40 minutes for a frozen section analysis. We decided to proceed with the thymectomy and fortunately we did not open the contralateral pleura, therefore this was not an issue, however we agree with your comment and this is a valuable point to consider in combined thymectomies and lobectomies. When feasible the lobectomy should be performed before the thymectomy. We added this point to the discussion section.

**Changes in the text:** In all the previous cases described in the literature, lobectomy was carried out as the first surgical step followed by the thymectomy. This is a logical approach that goes from the most superficial structures to the deepest ones, and prevents any complications associated with bleeding into the contralateral chest cavity if the contralateral pleura is intentionally or unintentionally opened.

**Comment 3:** Are there any indications for performing a thymectomy in the lateral decubitus position? If the left brachiocephalic vein is injured, the left brachiocephalic vein cannot be clamped while compressing and hemostasis in the lateral decubitus position. Therefore, it is recommended to use the hemilateral decubitus position, which allows the transition to a median sternotomy, or the lateral thoracic intercostal approach in the supine position. However, when approaching from the left side in the supine position, the heart is close to the chest wall and surgical operation is difficult. Please add some comments.

**Reply 3:** For a standard VATS thymectomy we place the patient in a semi-supine 30° position with a roll placed under the left side of the patient, and the ipsilateral arm held abducted over a padded L-screen for exposure of the axilla. By beginning with the patient in the lateral decubitus we were able to rotate the patient to a 30° semi-supine position easily to perform the thymectomy. The sternum was left uncovered in case we needed to convert to sternotomy. We felt this position was suitable because we could convert to thoracotomy and sternotomy without a problem, but most importantly we were able to easily rotate the patient from the lateral decubitus to the semi-supine position to perform both procedures in the standardised position for each procedure. For the reasons you stated we do not believe there are indications to perform thymectomy in the lateral decubitus position as bleeding control and an unobstructed view of the mediastinum is difficult to achieve.

**Changes in the text:** There is no need for inserting additional ports; rotating the table from a lateral position to a semisupine position should be sufficient to get a good view of the entire field. We do not recommend performing thymectomy in the lateral decubitus position as left brachiocephalic bleeding control is difficult to achieve in this position.