

## AB016. OS04.02. Comparison of left and right-sided approach video-assisted thymectomy for centrally located thymic tumors

Chenxi Zhong, Ning Xu, Zhitao Gu, Teng Mao, Wentao Fang

Department of Thoracic Surgery, Shanghai Chest Hospital, Shanghai 200030, China

**Background:** Due to the increasing popularity of video-assisted thoracoscopic surgery (VATS), minimally invasive thymectomy has been employed more frequently. In cases of VATS thymectomy, left or right-sided approach was usually determined according to tumor location. However, for centrally-located tumors, VATS thymectomy may be performed from either side. And each approach has its advocator. A question remains which side approach is preferable. The purpose of this study was to compare the clinical outcomes of left-sided and right-sided approach VATS thymectomy for patients of centrally-located thymic tumors.

**Methods:** For the purpose of the study, centrally-located lesion was defined as tumor with their epicenter located between the bilateral internal mammary vessels, and those with epicenters lateral to the internal mammary vessels were defined as laterally-located. Then, centrally-located tumors were subdivided as left-of-center (tumor center to the left of midsternal line) and right-of-center (tumor center to the right of midsternal line). Clinicopathologic factors, surgical outcomes, and follow-up results were compared between groups of patients according to tumor laterality.

**Results:** Between February 2008 and October 2016, a total

of 249 thymic tumors considered resectable under VATS at Shanghai Chest Hospital were included in the study. Among them, 140 tumors were laterally-located (62 left-sided, 78 right-sided), all of them resected via ipsilateral approach. Among 109 patients with centrally-located lesions, left-sided approach VATS thymectomy was employed in 48 patients (group A) and right-sided approach in 61 patients (group B). Resection was complete in all cases. Twelve (25%) patients in group A and twelve (20%) in group B were operated via the approach contralateral to tumor position ( $P=0.78$ ). In addition, the co-resection rate of invading adjacent organs were comparable (5/48 in group A *vs.* 8/61 in group B,  $P=0.75$ ) between groups. The two groups were comparable in age, gender, tumor size and pathological staging. Intraoperative bleeding occurred in 3 patients (1 in group A and 2 in group B) due to injury of the innominate vein. Operation time, intraoperative blood loss, postoperative complications, duration of postoperative chest drainage, length of the intensive care unit stay, and hospital stay did not differ between the two groups. No local recurrence was observed in either group during follow-up.

**Conclusions:** For centrally-located thymic malignancies, VATS thymectomy can be safely accomplished through either left-sided or right-sided approach. And both approaches provide comparable oncological results as long as the lesion could be completely resected.

**Keywords:** Thymic tumors; thymectomy; video-assisted thoracoscopic surgery (VATS)

doi: 10.21037/med.2017.AB016

**Cite this abstract as:** Zhong C, Xu N, Gu Z, Mao T, Fang W. Comparison of left and right-sided approach video-assisted thymectomy for centrally located thymic tumors. *Mediastinum* 2017;1:AB016. doi: 10.21037/med.2017.AB016