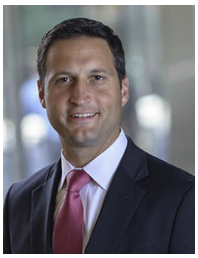
33. Scott WJ, Allen MS, Darling G, Meyers B, Decker PA, Putnam JB, et al. Video-assisted thoracic surgery vs open lobectomy for lung cancer: a secondary analysis of data from the American College of Surgeons oncology group Z0030 randomized clinical trial. *J Thorac Cardiovasc Surg*. 2010;139:976-83.

Key Words: sleeve lobectomy, video-assisted thoracoscopic surgery, lung cancer

Discussion

Presenter: Dr Jiajun Deng



Dr Matthew Bott *(New York, NY)*. You alluded to my comment, which is the sheer volume of cases in the series. You identified 350 patients who had sleeve lobectomy over a 4-year period, and that's after you excluded 160 because they had a sleeve lobectomy and arterial work! So that's approximately 100 sleeve lobectomies per year. Our fellows would love to have that sort of opportunity. As far as my questions go, you answered some of them during the course of your talk, but it seemed like from the abstract that you are performing both open and VATS lobectomies over the study period. Can you tell us a bit about how you select patients for one of those operations versus the other. I think there were some indications that tumor size comes into play. What sort of things do you look at when you're planning these procedures?

Dr Jiajun Deng *(Shanghai, China)*. You can see in the scatter plot before 2015, we mostly perform via thoracotomy. After 2016, about less than half of the sleeve lobectomy cases were performed by VATS. It's really not related to the characteristics of the patients, it's related to the surgeons. If we are confident and get enough experience in VATS, it seems we might do it.

Dr Bott. So you'd say it's mostly surgeon preference.

Dr Deng. Yeah, it is mostly the surgeon's decision.

Dr Bott. Okay, and then I was going to ask you about the anastomotic technique between the VATS and open. It sounded like you discussed that a bit, so running technique in the minimally invasive cases and then interrupted sutures maybe in the open cases? I was impressed to see that the operative time really wasn't different. Perhaps modifying the technique is helpful for keeping operative time consistent. But the other thing I think it speaks to is where you guys probably were in the learning curve when you were operating on these patients. You're probably well along. So for those of us who don't necessarily do these VATS sleeve lobectomies routinely, what does it take in terms of proficiency for us to feel comfortable doing these sort of cases. Can you give us some insight there?

Dr Deng. I couldn't take any credit for this kind of surgery or the technical part to give you a suggestion. I can say that most of these operations, especially those performed after 2015, were done by uniportal procedure. I think it's based on your training.

Unidentified Speaker. Were you asking about the learning curve?

Dr Bott. Yes, how many procedures do you think it would take? With the number of cases you do, it looks like 3 days (sic).

Dr Deng. I think the learning curve occurs before this study period.

Dr Bott. Dr Cerfolio made the point this morning during the plenary session that perioperative outcomes are important, but in cancer operations, long-term survival is critical and I'm glad you showed the data about RFS in the 2 procedures. The only thing I didn't see you discuss was completeness of resection. Do you have data on R 0 versus R 1 and 2 resection for the 2 different procedures and were they equivalent?

Dr Deng. I don't have the point about the long-term outcome. More than 50% of patients were operated after 2015. I'd say the follow-up is kind of short, less than 3 years. All these patients have been R0 resected.

Dr Bott. Okay. Thanks a lot.

Unidentified Speaker. When I see videos on VATS sleeve resection, they always show the reconstruction phase, the anastomosis, and they seldom show the resection phase, which most of the time is more demanding and difficult. So this matches with the question that Dr Bott asked concerning the operative time. I was also surprised that the operative times were comparable between the 2 techniques. Now my inference is that probably you select the most difficult cases for open and leave easier cases for VATS. Is my inference correct?

Dr Deng. It might be possible because all the surgical decisions were based on the surgeons' preference. It might be possible that more challenged and complicated cases might be more likely to be operated through thoracotomy. That's a limitation of this study.

Unidentified Speaker. Do you have any data on conversion?

Dr Deng. There were 5 conversions.

Unidentified Speaker. You had 2 bronchopleural fistulas?

Dr Deng. There were 2 patients in each group.

Unidentified Speaker. In each group. Were they from the anastomosis?

Dr Deng. One patient in the thoracotomy group died 3 days postoperatively.