Editorial

A new insight on VATS lobectomy versus thoracotomy lobectomy through a RCT

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VATS or thoracotomy lobectomy? This issue is well addressed in this RCT. This is a value of great importance to really understand the merits and disadvantages for this "new" technique: the authors could have tackled this topic by collecting data retrospectively with observational studies instead of pursuing a demanding and time consuming non-inferiority, phase 3, multicenter randomized clinical trial (1).

According to the author only four RCTs so far compared VATS and open lobectomy, whose two verified oncologic efficacy (2,3), one investigated acute phase response markers (4), and one studied postoperative pain and quality of life (5). It is notable that almost three decades have gone since the report of Roviaro and coworkers (6) in which we have kept talking about this "new" technical procedure, until today, without prospective studies designed to analyze the possible different ways of this surgical act.

In this paper only short-term perioperative outcomes have been presented; the analysis for oncologic outcome is still under evaluation because of timing. Among different short-term secondary end points only operation time (150 *vs.* 166 minutes, P=0.009) and intraoperative blood loss (P=0.001) have resulted relevant.

Even if, on one side, multicentricity could represent a bias in not managing patients and procedures uniformly, on the other side this could represent a physiological heterogeneity.

After assuming that VATS lobectomy has been demonstrated to be a safe, minimally invasive approach for the surgical treatment of lung cancer the most recent thoracic surgeons questions are also concerning on how doing it, on the possible different methods of execution: is it uniportal, biportal or triportal the best approach? The best choice is often a meeting point between the best and safest clinical advantages for the patient and the best surgeon feeling of choosing not the best possible technique but the technique most suited to the individual situation for gaining, safely, the best results.

However there is still something quite old in this paper.

In the last few years uniportal VATS seems promising exciting results (7): this technique is spreading, being performed in high volume centers worldwide, thus guaranteeing, with a physiological learning curve, even better results (8).

It would be really interesting in the future to evaluate in this study a subanalysis in different approaches (multiportal *vs.* uniportal), even if the number of ports was not defined in this trial and depended on the surgeon's preference, being in the majority of cases 3 or 4 (according to the text).

As it may be seen also on ClinicalTrial.gov, we think that up to now the Authors have matched the first aim of the study that consisted in evaluating the early clinical benefits of VATS lobectomy when compared with the axillary thoracotomy; the following aims (late effects, overall and disease free survival and quality of life) will arrive in future, maybe with new evidences that we are not currently able to foresee, but probably would be of paramount importance to assess future clinical guidelines and good-practice recommendations.

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References

1. Long H, Tan Q, Luo Q, et al. Thoracoscopic Surgery Versus Thoracotomy for Lung Cancer: Short-Term Outcomes of a Randomized Trial. Ann Thorac Surg 2018;105:386-92.
2. Kirby TJ, Mack MJ, Landreneau RJ, et al. Lobectomy--video-assisted thoracic surgery versus muscle-sparing thoracotomy. A randomized trial. J Thorac Cardiovasc Surg 1995;109:997-1001; discussion 1001-2.
3. Sugi K, Kaneda Y, Esato K. Video-assisted thoracoscopic lobectomy achieves a satisfactory long-term prognosis in patients with clinical stage IA lung cancer. World J Surg 2000;24:27-30; discussion 30-1.
4. Craig SR, Leaver HA, Yap PL, et al. Acute phase responses following minimal access and conventional thoracic surgery. Eur J Cardiothorac Surg 2001;20:455-63.
5. Bendixen M, Jørgensen OD, Kronborg C, et al. Postoperative pain and quality of life after lobectomy via video-assisted thoracoscopic surgery or anterolateral thoracotomy for early stage lung cancer: a randomised controlled trial. Lancet Oncol 2016;17:836-44.
6. Roviaro G, Rebuffat C, Varoli F, et al. Videoendoscopic pulmonary lobectomy for cancer. Surg Laparosc Endosc 1992;2:244-7.
7. Nachira D, Meacci E, Ismail M, et al. Why to change from multiportal to uniportal VATS? Video-assist Thorac Surg 2018;3:14.
8. Abu Akar F, Gonzalez-Rivas D. Training in an ultra-high-volume center. Video-assist Thorac Surg 2018;3:17.