Commentary: Too old or not too old, that is the question: Video-assisted thoracoscopic surgery is (part of) the answer

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Central Message

Dr Pages and colleagues present a rigorous administrative database study demonstrating that video-assisted thoracoscopic surgery lobectomy significantly decreased postoperative mortality for octogenarians with localized lung cancer.

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Age is an issue of mind over matter. If you don't mind, it doesn't matter.

—Mark Twain (1835-1910)

In the present article, Dr Pages and associates¹ seek to address the absorbing question of the impact of a minimally invasive approach, compared with open thoracotomy, on lobectomy in octogenarians. Because of the use of a well-documented French national administrative database, inspired by the US Medicare System and called Programme de Médicalisation des Systèmes d'Informations, the authors concluded that video-assisted thoracoscopic surgery lobectomy significantly decreased postoperative mortality for octogenarians with localized lung cancer.

One might ask why the thoracic surgical community should be concerned with the findings of this study? Not only because this invigorating article addresses the issue of type and quality of thoracic surgery in octogenarians, which is an important topic in the modern era of thoracic surgery, but also because the current article reinforces concepts suggests important management considerations and fosters new ideas.

It is well known that age is, intrinsically, a risk factor of postoperative mortality,² notably because of physiologic modifications (structural, functional, morphologic) of the elderly.³ When looking at our thoracic daily practice, both the Epithor (French) and the Surveillance, Epidemiology, and End Results (US) databases show the increased number of sublobar resections and the low level of lymph node samplings in octogenarians.^{4,5} One of the most important strengths of this article is its ability to demonstrate that lobectomy benefits octogenarians as much as it benefits younger patients. Nevertheless, it differs substantially from the recently published article on the Dutch Lung Surgery Database⁶ demonstrating a significant increase in

operative mortality among patients aged more than 80 years, although the incidence of complications was similar in all age groups. However, this apparent discrepancy only reflects a way of seeing things. Indeed, when analyzing the Society of Thoracic Surgeons General Thoracic Surgery Database in patients 65 years and older, Fernandez and colleagues⁷ demonstrated in patients with stage I an expected reduced survival with increasing age at diagnosis. Obviously, all age groups (65-69 years, 70-74 years, 75-79 years, and ≥80 years) have significantly worse survival than expected age-matched control subjects in the general population. If age and stage are clearly identified as the strongest predictors of long-term survival in elderly patients,⁸ procedure choice (video-assisted thoracoscopic surgery vs open) and type of approach (lobectomy vs sublobar) would also be considered as potentially modifiable predictors of long-term survival after lung cancer resection. In this context, the expected results of the STEPS study (NCT 02360761), which is the first randomized central trial comparing sublobar resection versus lobectomy on the surgical treatment of elderly patients with early-stage non-small cell lung cancer, might be of great management importance. Last but not least, this article also had the important merit of emphasizing some fundamental points:

the rigorous selection of patients as the result of predictive risk modeling⁹ and the mandatory implementation of a fast-tracking program.

For now, Dr Pages and colleagues¹ are to be congratulated for their contribution to this area. From the standpoint of medical care, their results will certainly affect future patient management.

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