

EDITORIAL COMMENT

Cristina Rodrigues

Thoracic Surgery, Centro Hospitalar Universitário Lisboa Norte, Lisboa

Lung cancer treatment in the elderly

More and more, the mentality is changing from the chronological age, to the biological one! Old age no longer means sick and frail people! Changing lifestyles and active aging are in vogue, so we often encounter fit autonomous persons in our daily practice. All the more reason for thoracic surgeons to look at the elderly from a functional point of view.

Functional evaluation protocols have been well established for lung cancer surgery (1), however, not all health care professionals have access to cardiopulmonary testing, recommended in borderline patients. Less precise equivalents like the 6 minute walking test or the stair climbing test, have been proved effective (2) (3), but were not validated in older frail patients that may have physical disabilities and certainly are not adapted for minimally invasive lung sparing surgery, that allied to anesthetic techniques to minimize post-operative respiratory depression and pain control, contribute to minimal impact of lung resection surgery.

Nevertheless, we should not forget that even fit elderly have to be handled with particular care, as for some, surgery is the least aggressive lung cancer treatment we have to offer.

Respiratory rehabilitation programs play an important role in preparing the less fit, accompanying them through the entire process until the return to daily activities after surgery.

Frailty scales for oncological patients in general and lung cancer patients in particular, have been tested and related to outcomes after different treatment modalities (4) (5). From early to advanced stages fragility has prognostic value and should be taken into account. High-risk cases will still present themselves at the outpatient department, and for these particular cases, treatment decisions have to be weighted at the multidisciplinary meeting.

Personalized treatment demands that an adequate sample of the tumor is collected, for while alternative local treatments deriving from the advances in radiation oncology are an option when surgery is contraindicated, precision medicine has less toxic medications to offer when a diagnosis can be attained with low morbidity.

Debilitated patients does not necessarily mean untreatable and even best supportive care is valid and has real impact on quality of life when heavy symptoms like pain or dyspnea are present.

REFERENCES

1. ERS/ESTS clinical guidelines on fitness for radical therapy in lung cancer patients (surgery and chemo-radiotherapy). A. Brunelli, A. Charloux, C.T. Bolliger, G. Rocco, et al. 2009, *Eur Respir J* , Vol. 34, pp. 17-41. DOI: 10.1183/09031936.00184308.
2. The 6-min walk test in the functional evaluation of patients with lung cancer qualified for lobectomy. Stefan Wesolowski, Tadeusz M. Orłowski and Marek Kramc. 2020, *Interactive CardioVascular and Thoracic Surgery*, Vol. 30, pp. 559–64. doi:10.1093/icvts/ivz313.
3. Stair-Climbing Test Predicts Postoperative Cardiopulmonary Complications and Hospital Stay in Patients with Non-Small Cell Lung Cancer. Jingsi Dong, Yousheng Mao, Jiagen Li, Jie He. 2017, *Med Sci Monit*, Vol. 23, pp. 1436-1441. DOI: 10.12659/MSM.900631.
4. Frailty and Cancer: Implications for Oncology Surgery, Medical Oncology, and Radiation Oncology. Cecilia G. Ethun, Mehmet A. Bilen, Ashesh B. Jani, Shishir K. Maithel, et al. 2017, *CA: A Cancer Journal for Clinicians*, Vol. 67, pp. 362-377. doi: 10.3322/caac.21406.
5. Impacts of Frailty on Prognosis in Lung Cancer Patients: A Systematic Review and Meta-Analysis. Shuiping Dai, Ming Yang, Juan Song, Sisi Dai and Jinhui Wu. 2021, *Frontiers in Medicine*, Vol. 8, p. Article 715513. doi: 10.3389/fmed.2021.715513.