

The Role of the Pulmonologist in Chemotherapy for Lung Cancer

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Lung cancer is the neoplasm with the highest incidence and mortality rates in Spain. Analyzing separately for men and women, the respective incidences in 1990 were 51.6 and 3.4 per 100 000 inhabitants.¹ The mortality rates that same year were 46.2 and 3.5 per 100 000 inhabitants in men and women, respectively.² These data indicate that the main cause of death related to neoplastic disease in males is lung cancer—which accounts for 27% of deaths from such processes, while prostate and colon cancer follow at a great distance. In women, lung cancer occupied sixth place, accounting for 4.5% of deaths.

Pulmonology is the medical specialty that deals with the prevention, diagnosis, and treatment of all diseases that affect its target organ, the lung. The need for both theoretical and practical training in the management of lung cancer, including knowledge of chemotherapy, is specified in the proposals of the European Union of Medical Specialists' working party report on the training of pulmonologists in Europe.³

Chemotherapy produces a high rate of objective responses in small cell lung cancer, with 2-year survival rates of 40% to 60% in cases of limited disease.⁴ In the nonsurgical management of nonsmall cell cancer, however, its role is controversial, and only recently have protocols including cisplatin been shown to increase both patient survival and quality of life.^{5,6} Moreover, induction or neoadjuvant chemotherapy administered before surgical treatment may make it possible to improve survival by eradication or reduction of tumor mass and subclinical metastases not evident at the time of diagnosis.

At present, it is specialists in medical oncology who supervise the greater part of chemotherapy treatments while pulmonologists are relegated simply to diagnosing the disease without participating in decisions about therapy.

To gauge the interest of pulmonologists in the implementation of a chemotherapy program, we carried out a national survey to be answered by the chief of the respiratory medicine service or by the person on the staff with interest in lung cancer. Completed questionnaires were received from 103 hospitals in 16 of Spain's 17 autonomous communities.

To the question of whether the hospital has an oncology service, the answer was negative in 30.3% of the cases. These centers have to refer their patients to another hospital to be treated with chemotherapy. At present, only 17 pulmonology services directly administer and manage chemotherapy treatments. No differences were observed in relation to types of tumor treated, meaning that the percentages were the same for chemotherapy prescribed for small and nonsmall cell carcinomas and for neoadjuvant treatment. Ten pulmonology services that had once administered chemotherapy treatments reported having abandoned the practice. The reason given is always the same: creation of a medical oncology service in the hospital.

Fifty-one percent of those surveyed said that they were interested in beginning to administer chemotherapy. The percentage of affirmative responses increased to 52.1% when respondents were asked if they favored a protocol for chemotherapy treatment established by the Spanish Society of Pulmonology and Thoracic Surgery (SEPAR).

Our data should be analyzed from two different perspectives, one clinical and the other training oriented. From a clinical standpoint, it is clear that lung cancer is a high-incidence disease in our population, one whose diagnosis in Spanish clinics has become almost routine. Nevertheless, only 16% of the respondents were capable of administering chemotherapy. What would our conclusion be if only 16% of pulmonologists were capable of treating a person with tuberculosis or severe asthma? Surely we would say that all is not well in our specialty and that remedial measures were in order. Why, then, do we not act in the same way in regard to chemotherapy treatments? Pulmonology has clearly been eclipsed by the appearance of medical oncology in the management of this type of treatment. One finding was

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overwhelmingly eloquent: 100% of the pulmonology services that have ceased to administer chemotherapy treatments did so when a medical oncology service was created in their hospital. But while the conflict of interest with oncologists is one reason, it is not the only one. Other more explicit findings are there to be examined. First, in hospitals where an oncologist is unavailable (30% of our sample), patients are transferred to other hospitals to receive their chemotherapy. A second point that we consider even more disturbing is that only 51% of those surveyed showed interest in beginning to use this type of treatment. How are we to interpret these responses? What is the reason for such lack of interest? Possible explanations are manifold. One is that, as pulmonologists, we do not consider ourselves qualified to administer chemotherapy. Díaz Lobato,⁷ in a recent editorial, defends the growth of our specialty by arguing the need to create separate units specializing in tobacco addiction, asthma, sleep disorders, and home health care. Yet the editorialist uses the term "lung cancer" only once, and on that single occasion does so to speak of a "conflict with other specialties." Another argument that is often given by hospital administrators is that centralized units (in this case medical oncology services) are more cost effective than sub-specialty units and require less investment. To date, no studies have compared the cost effectiveness of chemotherapy treatments carried out on oncology wards to those supervised by pulmonology units. Nevertheless, we could extrapolate from the arguments of Torres and Rodríguez-Roisin,⁸ who show that in a specialized pulmonology unit the care of patients with serious respiratory insufficiency is more rational and effective, at half the cost of care provided in a conventional intensive care unit.

Regarding training, Sobradillo⁹ wrote in 1990 that the future of pulmonology residents would be sustained by acquiring optimal preparation in their training period. Included in this training, we feel, should be a solid understanding of how to manage chemotherapy. Today, the notion that a former resident will be able to find a position at a tertiary care university hospital fails to square with the real opportunities available. At the same time, as Rosell and Ruiz¹⁰ argue, the expansion of regional hospitals, once staffed by internists, has led to their hiring of medical specialists to serve as consultants and to perform complementary tests. Mastery of chemotherapy can make a pulmonologist considerably more employable at such hospitals, given that medical oncologists are generally still unavailable on staff and the tendency is to avoid transferring patients to larger centers whenever possible because of budget limitations.

The last finding from our national survey is quite significant: 52% of pulmonology services state that they would agree to initiating a protocol for chemotherapy to

treat lung cancer as long as such a protocol were established by SEPAR. Like Martínez,¹¹ we believe that it is precisely the Oncology Assembly of SEPAR that should be charged with developing an open, multicenter committee to establish a protocol for chemotherapy and thus extend its use by pulmonologists. This is feasible because in the not-so-distant future such treatment will be less myelotoxic than it is today and will be administered orally,¹² thereby eliminating the complications involved in providing such treatment in a day hospital.

Finally, we continue to think that patients with lung cancer should be evaluated by a multidisciplinary team, although as pulmonologists we have the right and the obligation to participate directly in the management of patients with lung disease. Our duties clearly include taking direct responsibility for our patients' well-being and treatment and the avoidance of pointless mistrust among all participating specialties.

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