

margin of improving outcomes for patients with SCLC using surgery is narrow, and outcomes are dependent on multidisciplinary decision making and treatment. Until other studies demonstrate flexibility, surgeons must strive for guideline concordance. This is the way.

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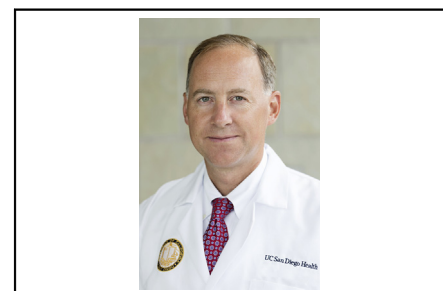
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Commentary: Survival after small cell lung cancer resection: Small opportunity?

Mark Onaitis, MD

Opportunities to enhance survival of patients with non-small cell lung cancer are common for thoracic surgeons, and algorithms for adjuvant therapy are clear. Multiple studies have demonstrated long-term survival improvement with adjuvant chemotherapy for node-positive patients. However, less is known regarding the much less common circumstance of complete resection of limited-stage small cell lung cancer. A National Cancer Database study recently demonstrated that adjuvant chemotherapy improves survival in resected small cell lung cancer patients.¹ The current study helps shed some light on the topic because it demonstrates, in an analysis of patients resected at several major centers over 33 years, that adjuvant chemotherapy



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CENTRAL MESSAGE

A strategy of resection of limited-stage small cell carcinoma with anatomic resection followed by adjuvant chemotherapy may improve survival over resection followed by no chemotherapy.

improves survival after surgical resection regardless of pathologic lymph node status.²

Strengths of the article include its multi-institutional nature, the relatively large sample size for a rare clinical situation, and the long time period covered. The premise also makes sense: Small cell lung cancer usually manifests with multiple distant metastases and these patients often have excellent initial responses to systemic chemotherapy and immunotherapy.³ It thus follows that systemic chemotherapy would help patients with limited-stage disease and presumed micrometastases. However, we must take pause in interpretation of the current study. First, confounding is a large issue in a retrospective study like this. Perhaps the patients who received chemotherapy were healthier than the cohort that did not receive

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therapy. Alternatively, perhaps some of the patients who were not known to have received chemotherapy actually did receive chemotherapy at centers that are not as high quality as those included in the current study. Also, because of the long time frame of the study, positron-emission tomography was only performed on 17% of the study population making accurate staging problematic. Next, a substantial percentage of patients in this study had tumors that were node positive or greater than T2. Presumably, these patients had resection of lesions without initial biopsy with surprise histology and nodal upstaging were found on pathologic analysis. In the modern era, preoperative histologic analysis of mediastinal and hilar lymph nodes for larger and central tumors would allow for purer stages for analysis.

Aside from adjuvant therapy, the natural history of nonhilar small cell tumors is unclear. We generally accept that non-small cell carcinoma spreads centripetally to segmental, hilar, and then mediastinal nodes. Anatomic resection with hilar and mediastinal lymph node dissection is effective because all disease is resected.⁴ Whether or not small cell lung cancer is similar in pattern of spread is less clear. Although hematologic spread seems more common, the current study demonstrates survival improvement of lobectomy

over sublobar resection. Although confounding may again be an issue, this is an important finding for surgeons. Complete resection of all disease may be possible in some patients with anatomic resection.

As imaging and the ability to use navigational bronchoscopy and liquid biopsy to diagnose patients continue to improve, surgeons will see more limited-stage small cell lung cancer that is resectable. Clearly, anatomic resection with adjuvant chemotherapy provides reasonable survival and should be the procedure of choice at present. As the number of these patients increases, opportunities to analyze the condition in more granular ways will exist.

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 Check for updates

Commentary: Find, resect, and treat: The evolving early-stage small cell lung cancer story

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The paper by Zhou and colleagues¹ in this issue of the *Journal* analyzes a cohort of 169 patients who had surgery for limited-stage small cell lung cancer over a 30-year period at 5 excellent institutions in North America. Their

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CENTRAL MESSAGE

Patients with early-stage small cell lung cancer should be offered surgical resection followed by systemic chemotherapy.

surgical results were superb, and the careful analysis demonstrated a survival benefit for adjuvant chemotherapy