Commentary: Invasive mediastinal staging for patients with lung cancer—We need to do better!

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Central Message

Preoperative and intraoperative lymph node evaluations are paramount to accurate staging and management. Unfortunately, this study demonstrates another example of inadequate lung cancer care in the United States.

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In this issue of the *Journal*, Osarogiagbon and colleagues¹ report another outstanding study demonstrating that the vast majority of patients undergoing lung cancer resection do not receive any invasive mediastinal staging before surgery.¹ Their results, which they derived from the Mid-South Quality of Surgical Resection Cohort between 2009 and 2018, show that only 22% of patients had invasive nodal staging performed. The region of the United States captured by this cohort has one of the highest incidence rates of lung cancer in the country, and these results add to the growing evidence that we, the medical community, are not providing an adequate quality of surgical care.

Osarogiagbon and colleagues¹ also defined a group of patients at high risk for nodal metastases by applying the criteria of tumor size of at least 3 cm or clinical node-positive disease by computed tomographic or positron emission tomographic scan. Even in this group, unfortunately, the rate of invasive nodal staging was only 47%. Not surprisingly, patients who did not receive preoperative nodal staging were also more likely to have no lymph nodes evaluated at the time of surgery, as documented by the pathology report. Furthermore, 20% of these patients without preoperative nodal staging had no mediastinal nodes examined pathologically at any time during their care. These results should be alarming to the thoracic community.

In contrast to these results, The Society of Thoracic Surgeons General Thoracic Surgery Database recently demonstrated that their participants are adequately evaluating lymph nodes in the routine care of patients with lung cancer.² Society of Thoracic Surgeons participants reported a median lymph node count of 10 nodes, with a median of 4 lymph node stations sampled. Only 5% of patients had no mediastinal lymph nodes evaluated, and 80% of those were wedge resections. It is imperative to understand that these results come from a very different surgeon and hospital population than those evaluated in the current study of Osarogiagbon and colleagues.¹ The majority of Society of

Thoracic Surgeons participants are dedicated thoracic surgeons who pay to participate in this specialty database, rather than a combination of thoracic, cardiac, and general surgeons in both academic and community practice from 4 contiguous regions of the mid-South.

Unfortunately, Osarogiagbon and colleagues¹ provide yet another analysis demonstrating poor quality of lung cancer care within the United States. These results, which include hospitals performing at least 5 lung cancer resections, are in sharp contrast to those seen in the Canadian province of Ontario. In April 2007, Cancer Care Ontario regionalized lung cancer resection to hospitals performing 150 lung cancer resections per year, or a minimum of 50 resections per year in more remote areas.³ Their program has moved lung cancer resections to dedicated thoracic centers, such that small, inexperienced surgeons and hospitals rarely perform these procedures. The Ontario program has resulted in improved resource allocation, and long-term survival results are pending. The Canadian Health Care System is a single-payer system with its own advantages and disadvantages that are beyond the scope of this commentary. I believe, however, that policy and payer decisions demanding a minimum standard of process and outcome measures for lung cancer care will be required to effect substantive change within the United States.

References

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