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Commentary: Outcomes after esophagectomy: The devil is in the details

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In this issue of the *Journal*, Patel and colleagues¹ analyze outcomes after esophagectomy in the National Cancer Database and find that greater institutional case volumes, particularly more than 20 resections annually, are associated with both better short-term outcomes and superior overall survival. These statistically significant findings persist after propensity matching.

During the past 20 years, multiple studies have reported an association between institutional annual case volume and surgical outcomes, especially for complex procedures such as esophagectomy and pancreatectomy.²⁻⁴ In countries with national health care systems and universal health insurance, these findings have led to the regionalization of care for esophageal cancer, the creation of perioperative care standards, and required annual audits of outcomes.^{3,4} However, even those countries do not necessarily have the ability to correlate case volumes and perioperative outcomes with overall survival. The 1500 hospitals participating in the National Cancer Database adhere to the stringent standards required for accreditation by the American College of Surgeons Commission on Cancer, including the prospective submission of data on tumor stage, surgical procedures, perioperative outcomes and, notably, overall survival. Thus, the current analysis by Patel and colleagues is based on high-quality data not easily available elsewhere and represents a valuable addition to the published literature.

Unfortunately, greater institutional case volumes serve only as a surrogate measure and do not provide the insight

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CENTRAL MESSAGE

Short-term outcomes and overall survival after esophagectomy are significantly better at greater-volume hospitals, but the specific factors responsible for these better results are still undefined.

needed for continuous quality improvement. Presumably, some combination of physician, nursing, and institutional expertise leads to improved outcomes, but the precise factors responsible remain undefined. Analyses of some large databases, such as the Society of Thoracic Surgeons General Thoracic Surgery Database, have attempted to define patient-specific factors influencing outcomes.⁵ Only some of these are modifiable, but their identification can guide patient selection and the intensity of perioperative care. The association between major technical complications, most notably anastomotic leak, and poor short-term outcomes as well as overall survival has been shown consistently,^{5,6} but the key details of surgical technique are not well studied or defined. The mystique of individual surgical approach and opinion in this area still plays too large a role. Esophagectomy plays a pivotal role in curative therapy for esophageal cancer, but, sadly, most patients still succumb to their disease even after resection. As the current analysis shows, poor surgical outcomes contribute significantly to the still-dismal survival statistics in this disease. Thus, as surgeons, our obligation is to optimize locoregional control through complete resection and to achieve the lowest possible morbidity through a technically flawless operation. “The devil is in the details,” and within the thoracic surgical community, it is time that we examine, optimize, and standardize every aspect of our perioperative care and surgical technique—to the benefit of our patients.

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