Ann Surg Oncol (2019) 26:188–189
https://doi.org/10.1245/s10434-018-7079-0

Annals of
SURGICAL ONCOLOGY
OFFICIAL JOURNAL OF THE SOCIETY OF SURGICAL ONCOLOGY

ASO AUTHOR REFLECTIONS

ASO Author Reflections: Quality Improvement in Minimally Invasive Esophagectomy

Jonathan C. Salo, MD

Division of Surgical Oncology, Department of Surgery, Levine Cancer Institute, Carolinas Medical Center, Charlotte, NC

PAST

Esophagectomy is a historically morbid procedure with a high complication rate. Minimally invasive techniques utilizing a wide variety of surgical approaches have been introduced to reduce perioperative morbidity and mortality, improve quality of life, and reduce hospital length of stay.[1] Comparative studies and randomized trials have demonstrated improvement in short-term outcomes with minimally invasive esophagectomy compared with open approaches.[2,3]

PRESENT

We initiated a program in minimally invasive esophagectomy in 2007 and saw immediate improvement in perioperative mortality.[4] In 10 years since then, we have carefully monitored our outcomes and made sequential modifications to our approach.[5] We scoured the available literature and adopted technology and approaches from a wide variety of sources. The result has been a progressive improvement in outcomes that forms the basis for our current report.

FUTURE

Our current goals are to continue reduce postoperative complications, particularly pulmonary complications. We are investigating "pre-habilitation" of patients before surgery, particularly patients who will undergo preoperative chemoradiation. While the endpoints of postoperative complications and mortality are of critical importance to patients, we also recognize the need to measure quality of life in our patients as a critical endpoint.[6]

While surgery for esophageal cancer is undoubtedly helpful in many patients, there also is undoubtedly a subset of patients whose risk of perioperative morbidity and mortality is sufficiently high that nonsurgical therapy with chemotherapy and radiation may be more beneficially. We are working to understand the factors in the risk/benefit equation of esophagectomy in esophageal cancer, particularly in patients with a robust response to chemoradiation. Our hope is to use this information to design a treatment plan which optimizes both clinical efficacy and postoperative quality of life.

DISCLOSURES The author has no conflicts of interest to disclose.

REFERENCES

1. Litle VR, Buenaventura PO, Luketich JD. Minimally invasive resection for esophageal cancer. *Surg Clin North Am*. 2002;82:711–28.
2. Straatman J, van der Wielen N, Cuesta MA, et al. Minimally invasive versus open esophageal resection: three-year follow-up of the previously reported randomized controlled trial: the TIME trial. *Ann Surg*. 2017;266:232–6.

ASO Author Reflections is a brief invited commentary on the article, "*Quality Improvement in Minimally Invasive Esophagectomy: Outcome Improvement Through Data Review.*" Ann Surg Oncol. 2018. https://doi.org/10.1245/s10434-018-6938-z.

First Received: 12 November 2018;
Published Online: 26 November 2018

J. C. Salo, MD
e-mail: Jonathan.salo@atriumhealth.org

3. Kauppila JH, Xie S, Johar A, et al. Meta-analysis of health-related quality of life after minimally invasive versus open oesophagectomy for oesophageal cancer. *Br J Surg*. 2017;104:1131–40.
4. Hanna EM, Norton HJ, Reames MK, et al. Minimally invasive esophagectomy in the community hospital setting. *Surg Oncol Clin N Am*. 2011;20:521–30, ix.
5. Lorimer PD, Motz BM, Boselli DM, et al. Quality improvement in minimally invasive esophagectomy: outcome improvement through data review. *Ann Surg Oncol*. 2018. https://doi.org/10.1245/s10434-018-6938-z.
6. Salo JC. Surgery for esophageal cancer: quality of life matters. *Ann Surg Oncol*. 2010;17:12–3.