Esophageal surgery in the 21st century

The esophagus has often been considered an unforgiving organ. Traversing 3 body regions, lacking adventitia, harboring complex innervation, lymphatics and blood supply are some of the factors making esophageal surgery a complex surgery with notorious reputation given its significant morbidity and mortality profile.

By the end of the last century, mortality rate ranging up to double digit rate was a norm in many centers in which esophagectomy was performed (1). As a consequence, many referring physicians considered certain conditions to be non-operable, sentencing many patients to a symptomatic, miserable poor quality of life and shortened survival (2).

Like most fields in surgery, there have been marked improvements in modern-era foregut surgery and specifically, esophageal surgery. As more surgeons became familiar with the unique anatomy and physiology of the esophagus, pioneers improved surgical techniques which together with early recognition of surgical complications and improvement of perioperative care reduced the rate of complications and mortality of these complex surgeries. Advanced training and specialized fellowship programs yielded a larger number of surgeons with expertise and thus further improved overall outcomes.

Since the first attempted morbid esophagectomy was described at the end of the 19th century, long way has passed till nowadays where esophageal surgeons are performing tissue based precise surgical interventions.

Modern platforms and less invasive technologies, such as combined laparoscopy/thoracoscopy, robotic surgery, and other innovations such as endoscopic fundoplication and myotomy have become the "bread and butter" of the foregut surgeon.

With this in mind, this special edition of the *Annals of Translational Medicine* features contributions from experts in esophageal surgery, radiology and medical oncology.

These distinguished leaders describe the most up-to-date indications, approaches and techniques of some of the most common benign diseases of the esophagus, as well as curative and palliative approaches to manage esophageal malignancies, and some unique circumstance of emergent esophageal surgery. Details of complex endoscopic and minimally invasive platforms are described. Updates in esophageal oncology and radiology as well as data and experience with extended indications and complex situations such as esophageal surgery in lung transplant and morbidly obese patients are reported. Lastly, the newest innovations of fluorescence-guided esophageal surgery and the most challenging esophageal replacement and transplantation are detailed.

With the goal of serving our patients best by providing them expert and up-to-date care, we hope all physicians- general and thoracic surgeons, gastroenterologists, radiologists and oncologists, will find this concise but thorough review helpful and interesting.

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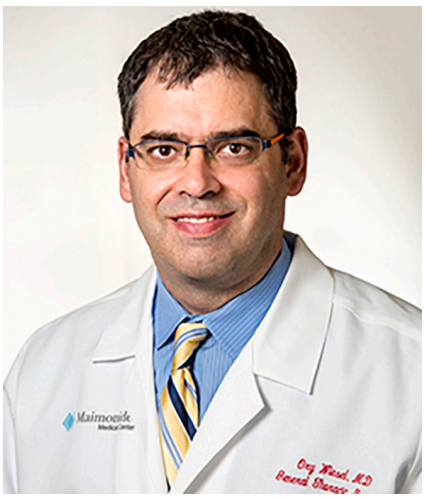

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