

Improvements in perioperative care for esophagectomy

Treatment for esophageal cancer treatment has evolved substantially over the past years, leading to an increased quality of life and a better prognosis for patients. A broad field of technical advances and new treatment modalities have changed the current approach to the patient with esophageal carcinoma. These include the introduction of neoadjuvant therapy, certain improvements in surgical treatment, new endoscopic treatment techniques, and patient pre- and rehabilitation.

In the surgical field, esophagectomy remains the cornerstone of treatment. Special advancements in esophagectomy are combined with a shift towards more dedicated expert centers handling a high volume of patients. This resulted in an increase of profound knowledge of factors leading to optimal results. Major advancements in surgery over the past years were minimal invasive surgery and enhanced recovery after surgery (ERAS) protocols and these techniques and protocols have increasingly been adopted for esophageal surgery nowadays.

We are proud this focused issue of the *Journal of Thoracic Disease (JTD)* contains in condensed form a broad range of improvements in perioperative care for esophagectomy. A group of 33 international experts in this field and their collaborators discuss the most current optimal treatment strategies holding for the preoperative, peroperative and postoperative phases of the esophagectomy; thereby leading to a comprehensive summary of start-of-the-art care. Many aspects of care are treated, such as preoperative nutrition, prehabilitation, and psychological support once the diagnosis and treatment's plan have been established. Furthermore, aspects as the relation of smoking and pulmonary complications, indication and technique for local resection and the controversial aspect of preoperative conditioning of the stomach are discussed. Moreover, important perioperative aspects such as the use of one- or two-lung ventilation in minimally invasive esophagectomy (MIE), the question of proper anesthesia, the step-by-step mesoesophageal resection, the approach of the upper mediastinum, the most optimal approach of the gastric tube, the role of immunofluorescence to control its perfusion, a description of the hybrid approach for MIE and a review of the robot assisted MIE. Next, benchmark analysis of MIE and the question how to approach a high volume of patients with esophageal cancer (as in China) are addressed.

Regarding the postoperative period after esophagectomy, different papers have depicted postoperative aspects as the treatment of postoperative pain by epidural anesthesia or vertebral anesthesia, the different ERAS programs, the question how to reduce pulmonary complications, the early detection of anastomotic leaks, the importance of atrial fibrillation, effect of standardized hemodynamic protocols, the matters of early feeding whether orally, by jejunostomy or by nasojejunal tube, the treatment of delayed emptying and the paramount topic of the learning aspects of this MIE.

We are pleased that all these collected items of improvement reflect not only the most modern aspects of perioperative care surrounding esophagectomy but also treat many other controversial aspects that need to be elucidated in a near future.

We congratulate all the authors for the quality of their contributions and the $\mathcal{J}TD$ for the opportunity of publishing this issue. Speaking for all contributors, we are grateful for the effort by the $\mathcal{J}TD$ to make this special issue possible. Hence, in this issue we may engage in a concerted reflection on the significant advantages for our patients as provided by improvements in the treatment of esophageal cancer, now and in the future.

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