

Recent Advances in Minimally Invasive Esophagectomy

Florin Achim, Silviu Constantinoiu

Department of General and Esophageal Surgery, Center of Excellence in Esophageal Surgery, Sf. Maria Clinical Hospital, Bucharest, Romania

Abstract

The treatment of esophageal cancer has become more effective due to advances in surgical techniques, multidisciplinary approach, appropriate use of neoadjuvant therapy and perioperative care at centers of excellence in esophageal surgery. Esophagectomy is one of the most complicated and demanding procedures among all gastrointestinal surgeries with a very long learning curve in which excellence can only be achieved through improvement during all the surgical career. The results of esophagectomy are related not only to the volume of cases operated but also to the experience of surgeons in the management of postoperative complications. Initially, minimally invasive esophagectomy has encountered obstacles to implementation in several centers due to the cost and complexity of esophageal cancer treatment. Several meta-analyses and clinical trials published so far support the feasibility of the minimally invasive approach, the advantages of the post-operative period and the equivalence of oncological outcomes with the open technique, which is an important step in imposing minimally invasive techniques as a standard in the treatment of esophageal cancer. In this paper, we aim to analyze recent advances in minimally invasive esophagectomy, the evolution of endoscopic surgical techniques through our personal experience and the results of studies published in the medical literature in the last years.

Key words: esophageal cancer, minimally invasive esophagectomy, open esophagectomy, randomized controlled trial