Risk factors identified for readmission to hospital following esophagectomy

May 16 2016
Dr. Stephen D. Cassivi, Mayo Clinic Thoracic Surgeon and senior investigator of the study on readmission rates for patients undergoing esophagectomy. Credit: Mayo Clinic
Esophagectomy is a major surgical procedure associated with significant complications with up to 1 in 5 patients readmitted following hospital discharge. These unplanned readmissions are an important problem as they negatively impact patient care and, in the future, may have implications for reimbursement through the Hospital Readmissions Reduction program. Identification of patients at risk of readmission is critical for enabling centers to develop strategies to reduce unplanned readmissions. Some readmission events may be unavoidable, but others, often due to postoperative complications, are not. The key to reducing the burden on patients and healthcare resources is to identify potentially preventable readmissions and institute measures to mitigate them.

Researchers at Mayo Clinic (Rochester, MN) have identified risk factors for unplanned readmissions following esophageal resection. The results of their new study provide complete follow-up data for all patients undergoing esophagectomy at a high volume center over a one-year period in order to identify risk factors associated with unplanned readmissions. Karen J. Dickinson, MD, presents the results of this research at the 96th AATS Annual Meeting on behalf of the Thoracic Surgery Research Team at Mayo Clinic.

Unplanned readmissions are important because they impact a patient's quality of life and slow recovery after surgery. Furthermore, the CMS (Centers for Medicaid and Medicare Services) through their Hospital Readmissions Reduction program can reduce reimbursement payments to hospitals with "excess readmission."

"Careful collection of data regarding patient outcomes, including unplanned hospital readmissions, is essential to improve the quality of patient care since national databases can leave gaps in data regarding follow up of these patients by failing to identify all readmissions or emergency department visits patients may make after their surgery," asserted Dr. Dickinson.
For this reason, the Mayo Clinic Thoracic Surgery Research Team contacts every patient undergoing esophagectomy at their institution. This system allowed the team to accurately describe the incidence of unplanned readmissions following esophagectomy over the 12-month study period and investigate the associated risk factors in an effort to develop and implement strategies to improve patient care.

The researchers looked at patient demographics, co-morbidities, the distance each patient lived from the hospital, and surgical factors. They collected data about postoperative complications and discharge information. An international study group (Esophagectomy Complications Consensus Group, ECCG) determined the importance of recording all readmissions that occur in the first 30 days after esophagectomy in order to provide information about the care each institution is providing their patients. Details were collected about the timing of any readmissions in all patients who survived to thirty days.

Caption: Dr. Stephen D. Cassivi, Mayo Clinic Thoracic Surgeon and senior investigator of the study on readmission rates for patients undergoing esophagectomy. Credit: Mayo Clinic.

The investigators found that the readmission rate for all esophagectomies was 19% (approx. 1 in 5 patients) of 84 patients who were followed. Most readmissions occurred to the Mayo Clinic Hospital in Rochester, MN (88%) and the most common reasons for readmission were respiratory and gastrointestinal complications.

Risk factors that were associated with unplanned readmissions in patients having esophagectomy were longer operations (p