Minimally invasive esophagectomy (MIE) has the advantages of reduced post-op cardiopulmonary complications, faster recovery and better quality of life. MIE has been the standard approach for esophageal cancer in our center since year 2020. A systematic approach with prehabilitation and enhanced recovery after surgery is key in improving outcomes after MIE.

We herein report our protocol for MIE in esophageal cancer. A stepwise diagnostic, staging and multidisciplinary management pathway was adopted. All patients with histologically confirmed esophageal cancer were staged according to the 8th edition AJCC cancer staging with PET-CT scan. Patient assessment, comorbidity optimization and 3-axis prehabilitation were initiated on the first consultation. All cases were discussed in the multidisciplinary tumour board meeting and multimodality treatment approach was advocated. MIE was the standard surgical approach with selective ERAS pathway especially on goal directed fluid therapy, multimodality analgesia, timely extubation, early ambulation and enteral feeding.

A total of 10 patients underwent MIE between June 2020 to June 2021 with the MIE protocol. The mean age was 56.7. Adenocarcinoma was the commonest histology. All patients had neoadjuvant therapy due to locally advanced disease. 6 patients had McKeown MIE with either 3-field or total 2-field lymphadenectomy. The mean length of stay post-op was 8.3 days. The average post-op pain score was 2.3 and the mean time to ambulation post-op was 1.6 days. Post-operative complications were noted in 4 patients with only one being Clavien Dindo grade 3. There was no 90-day mortality post-op.

The early result of this systematic protocol with multidisciplinary approach, prehabilitation, MIE and selective ERAS pathway was promising. Evidence based practice with regular clinical audit are important in improving the quality of care and clinical outcomes.