

## Minimally invasive (MIE) Vs open surgery for cancer of esophagus and GE Junction. Long term results.

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### ABSTRACT

**Introduction:** MIE is becoming a preferred approach for cancer of esophagus and GE junction, but its benefits have yet to be confirmed in randomized controlled trials. We performed a retrospective comparison between these two approaches for complications and survival results.

**Methods:** Patients primarily going for surgery or after neoadjuvant chemo/ chemoradiation were reviewed. MIE varied from totally thoracoscopic and laparoscopic to a hybrid approach. Both MIE and Open approaches were a three, two or one incision procedures.

**Results:** MIE and open surgery were done in 128 and 293 patients, respectively. The mean basic parameters (referred as MIE/ Open) – age (59/ 57 years), duration of dysphagia (4/ 4 months), weight loss (8/ 9 kg), postoperative stay (13/ 14 days), hospital mortality (3/ 17), anastomotic leak (17/ 32), hoarseness of voice (8/ 16), number of harvested nodes (21/ 22), and R0 resection (122/ 263) did not differ significantly ( $p = ns$ ). Mean operative time (265/ 240 mins) and intraoperative blood loss (325/ 436 ml) differed significantly ( $p < 0.05$ ). Postoperative pneumonia was significantly less in MIE group ( $p < 0.001$ ). Median and 5-year overall survival was 33 months and 21% in MIE group; and 27 months and 20% in open group ( $p = 0.2$ )

**Conclusion:** MIE and Open surgery did not differ in major postoperative complications except postoperative pneumonia, which was less in MIE. Both the procedures were similar in achieving R0 resection, median and 5-year overall survival.

**Key words:** Esophageal cancer; Mckeon's esophagectomy, VATS