

World Cancer 2019: 3D Thoracoscopic minimally invasive 3rd stage extended 2 field Esophagectomy (MIE) done in left Lateral Decubitus (LD) position for esophageal carcinoma- An excellent alternative approach to Robotic esophagectomy- Aditya Mantri- Gujarat Cancer Research Institute

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Introduction: Minimally Invasive esophagectomy has now been established as a standard of care for patients with carcinoma esophagus, who are candidates for surgery. Last decade has seen an increasing number of such procedures using either through a conventional 2D laparoscopic approach or through a robotic approach. 2D laparoscopy is mostly being done in prone or semi-prone position by most of the surgeon's. Very few centres in India make use of the left lateral decubitus position for doing thoracoscopic mobilization of the esophagus and mediastinal lymph node dissection. In this article we want to present our experience of 55 patients of carcinoma esophagus who were operated by a 3D LAPROSCOPIC approach using a left lateral decubitus position for esophagus mobilization and a complete mediastinal lymph node dissection as a part of Mckweon's three stage esophagectomy. Here we wish to highlight the excellent results achieved with left lateral decubitus position and 3D laparoscopy in terms of the excellent 3D vision, the ease of clearing all the lymph node stations required for adequate staging according to the Japanese Esophageal cancer Classification, decreased intraoperative complications, decreased blood loss and the convenience of having the same orientation as of an open thoracotomy approach for esophageal mobilization.

Method: From June 2017 to August 2018, 51 patients of esophageal carcinoma were operated for minimal invasive three stages extended 2 field esophagectomy (MIE) using 3D thoracoscopy in lateral decubitus (LD) position in our department. Mediastinal nodes were harvested and sent individually as per Japanese classification of mediastinal lymph nodes station for histopathological examination. We did a retrospective analysis on the prospectively maintained data.

Results: A total of 51 patients underwent 3D thoracoscopic LD MIE. 34 patients received neoadjuvant chemoradiation while 17 were operated upfront. All patients had complete RO resection. Median 22 mediastinal lymph nodes were harvested (range: 3-65). Median operative time for thoracoscopic mobilization and extended 2F lymphadenectomy was 130 minutes. Median blood loss was 200 ml.

Anastomotic leak was present in 6(11.76%) cases of which 4 were treated conservatively. Pulmonary complications were seen in 3(5.88%) cases and managed conservatively. 6(11.7%) patients had partial recurrent laryngeal nerve paralysis and 2(3.92%) cases had permanent recurrent laryngeal nerve injury. In hospital mortality was in 2(3.92%) cases. Median hospital

stay was 11 days. There was no chyle leak, no conversion to open procedure

Conclusions: 3D thoracoscopic LD MIE gives excellent high resolution image quality, depth perception which can be advantageous for good mediastinal lymph node clearance with minimum blood loss, decreased operative time, minimum pulmonary complication and faster recovery.