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Early Post operative outcomes after oesophagectomy in a single unit in a tertiary cancer centre.

Oncology

KEYWORDS:

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Introduction

Oesophageal cancer is one of the disabling malignancies with a case fatality rate of 90%.though many patients present in the advanced stage and the poor performance status dies not allow them for any definitive management in majority of the cases.Surgery remains the primary modality in early resectable oesophageal cancer. The incidence varies across regions,race and ethinicity1.

Oesophageal cancer surgery is known to be associated with morbidity and mortality2. The study was aimed to identify pre and intraoperative factors that potentially influence morbidity and mortality after oesophagectomy for oesophageal carcinoma and its relation to the tumor subtypes ,to understand the nature of post operative complications and to define the impact of pre operative factors on the morbidity.

Materials and methods.

Of the 500 patients who get registered with carcinoma oesophagus at kidwai memorial institute of oncology,89 patients with stage II(pre op) were operated in between January 2013 and December 2015 in a single unit. The data was collected prospectively in a dedicated database and analysed retrospectively.85 patient records were available for analysis

Surgical procedures:

THE	52
TTE	23
Sweet's Procedure/LTA approach	2
VATS oesophagectomy	8

n=85(KMIO 500/yr)

Pre operative assessment was done by endoscopy and biopsy and CECT of thorax and abdomen. The performance status was assessed using the ECOG performance status and the respiratory system was assessed by PFT and Cardiac assessment by ECG and Echocardiography was done.all patients were given pre operative spirometry and bronchodilator nebulisation.Bronchoscopy was done for mid thoracic tumors.

Demographic data:

	MALE	FEMALE
No.of cases	41	34
Age	24-75	38-75
Mean Age	57.4	52.1

Nature of complications:

Complication	N	%
Cardiac	6	7.05
respiratory	31	36.4
Wound infection	15	17.6
RLN injury	8	9.4
Clinical leak	4	4.7
Death	8	9.4
Chyle leak	3	3.5
Stricture	12	14.11
reintubation	2	2.35
tracheostomy	2	2.35
Icu psychossis	2	2.35

Average ICU stay was 4days and Average hospital stay was 8 to 10days.The Average operating time was 120-150 minutes and average blood loss around 200ml.Clear liquid diet is started on post operative day 4[3].

Comparison of surgical procedures and complications

	THE	TTE	MIE
No of cases	52	23	8
Complications	12(24%)	15(65.2%)	
ventilation >12hr	16	20	
Atelectasis	5	7	
Pneumonia	6	11	2

Comparison of pre operative PFT and Post operative complications:

PFT	n	complications
Normal	28	2(7.14%)
Mild - moderate defect	44	17(38.63)
Severe defect	13	10(76%)

Comparison of ASA grade and post operative complications:

ASA	n	%
I	13	15%
II	38	32%
III	49	58%

	SIGNIFICANCE
THE VS TTE	+
PFT	+
ASA	+

Discussion:

Transhiatal oesophagectomy as compared to Trans thoracic oesophagectomy is associated with lower morbidity[2,10].Many authors considered THE to have inferior lymph node yield,but in the long run there were no significant differences in survival with either approach[12].Gastric conduit is the preferred choice of reconstruction after oesophagectomy.both cervical and intra thoracic anastomoses have equal results when performed in a standardized manner[8,9].there is a trend towards minimally invasive esophagectomy with Video assisted thoracoscopy replacing thoracotomy for mobilization of the thoracic oesophagus[4-6].

The profile of Indian patients differ from that of the west and the choice of surgical procedure has a significant effect on the outcome with respect to postoperative complications and mortality rate.In our study Open TTE was associated with increased mortality and morbidity.Patients with poor PFT and higher ASA grade were associated with increased complications.Pre operative spirometery and aggressive chest physiotherapy in the post operative period helped in mobilizing the patients early and assisted in faster recovery. Minimally invasive esophagectomy is being preferred especially VATS replacing open thoracotomy.our leak rates with

hand sewn end to end cervico oesophagogastric anastomoses is quite low and has helped us in avoiding the need for feeding jejunosotomy which was a routine in previously in all operated cases of carcinoma oesophagus[12].

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