

CASE REPORT

Case of Carcinoma Oesophagus with Hypertension and Ischaemic Heart Disease for Esophagectomy: Anaesthesia managementShravya Shetty¹, Ravi Madhusudhana², Anushri K³, Kunal HS⁴, Bharath CJ⁵**HOW TO CITE THIS ARTICLE:**

Shravya Shetty, Ravi Madhusudhana, Anushri K et. al, Case of Carcinoma Oesophagus with Hypertension and Ischaemic Heart Disease for Esophagectomy: Anaesthesia management. Ind J Anesth Analg. 2026; 13(1): 49-51.

ABSTRACT

Patients with a carcinoma presents with poor nutrition and comes with major morbidity (65%) and 30 day mortality rate of 4%. Needs multimodal treatment and work up with a multi-disciplinary team with Enhanced Recovery after Surgery (ERAS) protocols.

Our patient, 70 year old male had Hypertension, Ischaemic heart disease and Psoriasis on treatment. His preoperative investigations showed Hb of 7.8 gm%, albumin 2.9g/dl; Echo showed Mild MVP, Grade 2 AR, PASP of 25mm Hg, LV diastolic dysfunction. Others were within normal limits.

Epidural was secured at T9-T10 and GA given. A left sided double lumen tube (35 Fr) was introduced and fixed after confirmation of isolating each lung, patient had hypertension treated with Inj NTG tapered later. Epidural was activated with 8 ml of 0.25 mg Bupivacaine. During mediastinal manipulation, patient went into bradycardia and hypotension; transiently surgery was stopped and IV fluids were given and it settled. Total Blood Loss was 500ml and Replaced with one packed RBC. IV fluids RL, NS were given. Haemodynamics were stable later. After surgery he was extubated and sent to ICU for monitoring. Role of Anaesthesiologists in the perioperative period is very important for preparation, planning, conduct of Anaesthesia, one lung ventilation and for a better outcome.

KEYWORDS

• Anaesthesia • Carcinoma Oesophagus • One Lung Ventilation • Thoracotomy

AUTHOR'S AFFILIATION:

¹ Junior Resident, Department of Anesthesiology, SDUMC, Kolar, Karnataka, India.

² Professor, Department of Anesthesiology, SDUMC, Kolar, Karnataka, India.

³ Assistant Professor, Department of Anaesthesiology, SDUMC, Kolar, Karnataka, India.

⁴ Post Graduate Resident, Department of Surgical Oncology, SDUMC, Kolar, Karnataka, India.

⁵ Senior Resident, Department of Anesthesiology, SDUMC, Kolar, Karnataka, India.

CORRESPONDING AUTHOR:

Ravi Madhusudhana, Professor, Department of Anesthesiology, SDUMC, Kolar, Karnataka, India.

E-mail: ravijaggu@gmail.com

➤ Received: 11-12-2025 ➤ Accepted: 15-01-2026



Creative commons non-commercial CC BY-NC: This article is distributed under the terms of the creative commons attribution non-commercial 4.0 License (<http://www.creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the Red Flower Publication and Open Access pages (<https://rfppl.co.in>)

INTRODUCTION

Oesophageal carcinoma presents with patient in poor nutrition and comes with major morbidity (65%) and 30 day mortality rate of 4%.^{1,2} Needs multimodal treatment and work up with a multi-disciplinary team with Enhanced Recovery after Surgery (ERAS) protocols.³ Patients can be geriatric with comorbidities, which should be optimised for a better outcome.

CASE REPORT

Our patient was a 70 year old male weighing 60 kgs with gross weight loss, unable to swallow. Had undergone 4 cycle's of chemotherapy. Known case of Hypertension and Ischaemic heart disease on treatment. Also known case of Psoriasis on treatment. Previously operated for Lap cholecystectomy and Inguinal hernia. He was on Inj docetaxel, Inj Oxaliplatin, Tab clopitrova, Tab Nicorandil, Tab Dytor Plus.

His preoperative investigations showed Hb of 7.8 gm%, albumin 2.9g/dl; Echo showed Mild MVP, Grade 2 AR, PASP of 25mm Hg, LV diastolic dysfunction. Others were within normal limits.

Premedicated with Tab Rantac 75 mg 2hrs before surgery, Epidural was secured at T9-T10; Inj Glycopyrolate 0.2 mg, Inj midazolam 1mg IV and Preoxygenated and Induced with Inj Propofol 100mg, Inj Fentanyl 100mcg, Inj Loxicard 60 mg and Inj Suxamethonium 100mg for Intubation. A left sided double lumen tube (35 Fr) was introduced and fixed after confirmation of isolating each lung. Maintained with O₂, N₂O, Isoflurane and Vecuronium. Intraoperatively-HR, NIBP, SPo₂, ECG, Temperature, TOF were monitored along with Urine output.

The surgeon decided to go with Abdominal and Neck approach and patient had hypertension treated with Inj NTG tapered later once blood pressure was controlled. Epidural was activated with 8 ml of 0.25 mg Bupivacaine. During mediastinal manipulation, patient went into bradycardia and hypotension; transiently surgery was stopped and IV fluids were given and it settled. Total Blood Loss was 500ml and Replaced with one packed RBC. IV fluids RL, NS were given. Haemodynamics were stable later. After surgery he was extubated and sent to ICU for monitoring.

DISCUSSION

Patients presenting with Carcinoma oesophagus may also have co-morbidities, poor nutritional state and may be fragile.^{4,5}

The burden of cancer globally continues to increase because of aging and growth alongside an increasing adoption of cancer-causing behaviors, particularly smoking.^{6,7}

Cancer of Oesophagus is one of the least studied and deadliest cancers, in the past three decades important changes have occurred in the epidemiologic patterns. Advances in diagnosis, staging, and treatment of this condition have led to small but significant improvements in survival.⁸

Proper preparation in terms of nutrition, optimising co-morbidities, involving Nutritionist, pulmonologist, checking cardiac status along with ERAS protocol is important in preventing postoperative morbidity and mortality.

The POSSUM (Physiological and Operative Severity Score for the enumeration of Mortality and Morbidity) scoring system may also help in stratifying the risk. POSSUM and P-POSSUM scores were found effective scoring systems in clinical practice for use in abdominal surgery with a reasonably good prediction of morbidity and mortality rate.⁹

In one meta-analysis strong evidence was found for survival benefit of neoadjuvant chemoradiotherapy or chemotherapy over surgery alone in patients with oesophageal carcinoma.¹⁰

Surgery in carcinoma oesophagus is of high risk of mortality and morbidity. Though now VATS (Video assisted thoraco-scopy), minimally assess laparoscopy procedures have come, the role of Anaesthesiologist is crucial in maintaining one lung ventilation, Haemo-dynamics and a stable pain free period for better outcome.

In our patient there was weight loss, Hb of 7.8 gm% with hypertension and IHD; so blood was started immediately after induction and all vitals monitored to have a good perfusion of the Heart and the surgical site post anastomosis. Though he presented with Hypertension in intraoperative period, it was controlled with NTG infusion. Epidural was also activated. Post-operatively patient recovered with Epidural analgesia and was uneventful.

CONCLUSION

Role of Anaesthesiologists in the perioperative period is very important for preparation, planning, conduct of Anaesthesia, one lung ventilation and for a better outcome.

Conflict of Interest: Nil

REFERENCES

1. Biere SS, van Berge HMI, Maas KW, Bonavina L, Rosman C, Garcia JR et al. Minimally invasive versus open oesophagectomy for patients with oesophageal cancer: a multicentre, open-label, randomised controlled trial. *Lancet* 2012;19:1887-92.
2. N Briez, G Piessen, F Torres, G Lebuffe, J-P Triboulet, C Mariette. Effects of hybrid minimally invasive oesophagectomy on major postoperative pulmonary complications, *Brit J Surg* 2012; 99(11): 1547-1553.
3. Ford SJ, Adams D, Dudnikov S, Peyser P, Rahamim J, Wheatley TJ et al. The implementation and effectiveness of an enhanced recovery programme after oesophago-gastrectomy: a prospective cohort study. *Int J Surg* 2014;12(4):320-4.
4. Robinson TN, Wu DS, Pointer L, Dunn CL, Cleveland JC Jr, Moss M. Simple frailty score predicts postoperative complications across surgical specialties. *Am J Surg.* 2013; 206(4):544-50.
5. Yoshida N, Baba Y, Shigaki H, Harada K, Iwatsuki M, Kurashige J et al. Preoperative Nutritional Assessment by Controlling Nutritional Status (CONUT) is Useful to estimate Postoperative Morbidity After Esophagectomy for Esophageal Cancer. *World J Surg* 2016;40(8):1910-7.
6. Jemal A, Bray F, Center MM, Ferlay J, Ward E, Forman D. Global cancer statistics. *CA Cancer J Clin* 2011; 61: 69-90.
7. Parkin DM, Pisani P, Ferlay J. Global cancer statistics. *CA Cancer J Clin* 1999; 49: 33-64.
8. Enzinger PC, Mayer RJ. Esophageal cancer. *N Engl J Med* 2003; 349: 2241-52.
9. Shekar N, Debata PK, Debata I, Nair P, Rao LS, Shekar P. Use of POSSUM (Physiologic and Operative Severity Score for the Study of Mortality and Morbidity) and Portsmouth-POSSUM for Surgical Assessment in Patients Undergoing Emergency Abdominal Surgeries. *Cureus.* 2023 Jun 23;15(6):e40850.
10. Sjoquist KM, Burmeister BH, Smithers BM, et al. Survival after neoadjuvant chemotherapy or chemoradiotherapy for resectable oesophageal carcinoma: an updated meta-analysis. *Lancet Oncol* 2011; 12: 681-92.