

Anaesthesia Management in Endoscopic Ultrasound Guided Lung Biopsy

DR. MANJUSHA BHUME (CONSULTANT IN ANAESTHESIA MGM MEDICAL COLLEGE)

DR. PAUL RAFSON JANI (JR3 DEPT OF ANAESTHESIA MGM MEDICAL COLLEGE)

DR. BHALE PRAMOD (PROFESSOR IN ANAESTHESIA MGM MEDICAL COLLEGE)

Abstract:- Anaesthesia management of Endoscopic ultrasound guided lung biopsy in a case of carcinoma lung with broncho-pleural fistula in a 50 year old female patient using general anaesthesia.

I. INTRODUCTION

Endoscopic ultrasound (EUS) is a minimally invasive procedure to assess gastrointestinal and lung diseases. A special endoscope uses high-frequency sound waves to produce detailed images of the lining and walls of the digestive tract and chest, nearby organs such as the pancreas and liver, lung and lymph nodes.

When combined with a procedure called fine-needle aspiration, EUS is useful in obtaining tissue biopsy from the abdomen or chest for analysis. EUS with fine-needle aspiration can be a minimally invasive alternative to exploratory surgery.

The procedure was done under Total Intravenous Anaesthesia.



II. CASE REPORT

50 year old female, who was diagnosed as a case of Carcinoma lung with broncho pleural fistula was planned for EUS guided lung biopsy. She presented with breathlessness of 4 days duration, with a past history of taking ATT for TB for 50 days. The patient was currently on Ivabid 5mg BD. She was thin built, PR 110/min, BP 110/70 mm of Hg, RR 28/min, SpO2 99% with 15L O2.

MPC II, Mouth opening was adequate and neck movements were within normal limits.

Examination of RS showed decreased air entry on the left side. Other systemic examinations were within normal limits. Blood investigations were normal. ECG showed sinus tachycardia. Chest x ray showed complete left lung opacity. HRCT chest showed features suggestive of Neoplastic etiology- Carcinoma Lung with mediastinal and vertebral metastasis, B/L mild pleural effusion, Right lung hilar mass with distal Collapse – Basal atelectasis,

RTPCR was negative, patient was accepted under ASA Grade III. Patient was kept NBM overnight. Before shifting the patient to the endoscopy table, Anesthesia machine (Boyle's) & drugs and connections were checked. Standard monitors were attached ECG, NIBP, SPO2, ETCO2 were monitored and recorded.

IV line was secured in the right forearm with 20 G cannula. Patient was placed in the left lateral position & given oxygen support via nasal cannula at 4L/min. Patient was premedicated with glycopyrrolate 0.2 mg and Inj fentanyl 60mcg, induced with Inj propofol 30mg & Inj ketamine 40mg. And adequate maintenance doses of Inj Ketamine 20mg & Inj Propofol 20mg were also given throughout the procedure.

Procedure lasted for 30min, and the patient regained consciousness post procedure, haemodynamic parameters were stable with spo2 96% with oxygen support and was shifted to Surgical ICU with O2 support.

III. DISCUSSION

Although there are previous reports of EUS-FNA of a lung tumour adjacent to esophagus. The lung tumour was successfully visualised on EUS because esophagus had some mobility in the mediastinum. EUS-FNA should be considered for non-abutting lung nodule that cannot be biopsied under EBUS or CT guidance. TIVA is given with Inj. Fentanyl, Ketamine and Propofol. All gadgets were kept ready for intubation. Intra op PR, BP, ETCO2 were monitored.

IV. CONCLUSION

A successful management of a 50 yr old female diagnosed with carcinoma lung with broncho pleural fistula for EUS guided biopsy.

REFERENCES

- [1]. Transesophageal endoscopic ultrasound-guided fine needle aspiration for the diagnosis of a lung nodule that was non abutting on CT - Yousuke Nakai, Hiroyuki Isayama, Takeo Watanabe, Suguru Mizuno, Hirofumi Kogure, Saburo Matsubara, Minoru Tada and Kazuhiko Koike
- [2]. Endoscopic ultrasound in the diagnosis and staging of lung cancer - Sara Colella, Peter Vilman, Lars Konge, Paul Frost Clementsen