



Anesthesia For Feeding Jejunostomy In A Case Of Difficult Airway

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Abstract: Feeding jejunostomy, a palliative surgical procedure, was planned to provide long-term enteral nutrition to the patient, who had difficulty swallowing due to tumor involvement of the esophagus and surrounding structures. We report a case of a 75-year-old male with advanced squamous cell carcinoma of the esophagus, complicated by metastases and difficult airway. This procedure involves the placement of a feeding tube into the jejunum, bypassing the stomach and allowing direct nutritional support. It is commonly used in patients with advanced malignancies, particularly those with compromised swallowing or gastrointestinal function. In this case, a combined approach of dexmedetomidine infusion, bilateral intercostal nerve block, and bilateral transversus abdominis plane (TAP) block was used to ensure adequate anesthesia and pain control during the procedure. This case highlights the importance of a tailored anesthetic approach in managing complex airway and analgesic challenges in advanced cancer patients undergoing palliative surgeries like feeding jejunostomy.

Keywords - Difficult airway, Feeding jejunostomy, Intercostal nerve block, TAP block.

I. INTRODUCTION

Securing airway in advanced cancer patient has always been a challenge for anesthesiologist. Feeding jejunostomy is a palliative surgery performed in such patients to ensure adequate enteral nutrition. Being an upper abdominal intra peritoneal surgery, it requires controlled ventilation under general anesthesia. However, in advanced cancer of esophagus involving multiple neck nodes, intubation as well as tracheostomy for airway control is difficult; different techniques may need to be combined to avoid untoward consequences of loss of airway control. We have herein shared our experience of anesthetic management of one such case.

II. CASE REPORT

The patient was a 75-year-old male patient, diagnosed as advanced squamous cell carcinoma of esophagus involving jugular, retro pharyngeal, mediastinal nodes with multiple lung and vertebral metastasis. In view of advanced stage of disease, he had received palliative chemotherapy and was planned for feeding jejunostomy. On airway examination, mouth opening was adequate, but MP grade 4 and neck movement was restricted. His records revealed that endoscopic jejunostomy failed previously. Since general anesthesia was required and airway was difficult, it was planned to do awake fibroscopic bronchoscopy (FOB) and proceed further, but laryngeal opening could not be visualized. Because of multiple neck nodes, elective tracheostomy was also

difficult. Subarachnoid block was not given as multiple vertebral metastases were present. Therefore, after discussing it with the surgical team, it was planned that the patient should be provided dexmedetomidine infusion with bilateral intercostal nerve block and bilateral transversus abdominis plane (TAP) block.

Patient came with complaints of difficulty in swallowing since 2 months.

He was a chronic smoker and alcoholic which he stopped 1 year ago.

On examination:

Patient was conscious and coherent

Pulse rate: 78 bpm

Blood pressure: 110/70 mm of Hg

RS: B/l air entry present, B/l wheeze was present

CVS: S1, S2 present, no Murmurs.

Investigations:

Blood group: O positive

Hemoglobin: 11.2 gm%

Platelets: 2.14 lakhs/ cu.mm

Coagulation profile: Normal

LFT, RFT, Serum electrolytes were normal

ECG: Within normal limits

2D ECHO: EF-55%, No RWMA, No AR, MR, TR, PAH, Normal LV systolic function

Chest X-ray: Mild cardiomegaly, Prominent bronchovascular markings, consolidation of left lower lobe.

After securing intravenous line, standard monitors like 5 lead ECG, Pulsoximetry, NIBP, were attached and baseline values were normal. Infusion of dexmedetomidine was started. After loading dose of 1 μ g/kg over 10 min, maintenance dose of 0.4 μ g/kg/h was continued. Humidified oxygen supplementation with face mask was done. Ultrasound-guided bilateral intercostal nerve blocks were given with 22G needle from 6th to 9th ICS, 3ml of 0.25% plain bupivacaine was injected in each space. Ultrasound guided bilateral TAP blocks with 23 gauze spinal needle were given; 20 ml of 0.25% plain bupivacaine was injected on each side. After confirming the sensory level, surgery was started. The surgery lasted for 45 min and was completed without any complication.



III. DISCUSSION

In recent times, ultrasound-guided TAP block increased the success rate with reduction in complications. TAP block is commonly used for postoperative analgesia in anterior wall abdominal surgery. Intra peritoneal surgery under TAP block always carries a risk of pain and leaking out of gut while handling it. Supplementation with opioid analgesics will reduce the visceral pain sensation, but may cause respiratory depression that will be lethal in our case. That is the reason we avoided opioid-based analgesics and used dexmedetomidine. Thus, combining Dexmedetomidine with Intercostal nerve block and TAP block obviates the need for opioids by providing supplemental analgesia with sedation.

IV. CONCLUSION

Anterior abdominal wall surgery in patients with difficult airway can be done under regional intercostal nerve blocks and (TAP)blocks with analgesic supplementation without handling airway. It also provides postoperative analgesia and reduces analgesic requirement.

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