We encountered such a problem; however, the tracheostomy tube was successfully re-inserted via tracheal stoma using a paediatric laryngoscope.

A 32-yr-old male patient underwent decompressive craniotomy for severe head injury (Glasgow Coma Score 8). He was kept on ventilatory support in the postoperative period, because of poor general condition. In view of prolonged ventilatory requirement, surgical tracheostomy was performed. The procedure was uneventful, and further care was provided in the neurosurgical intensive care unit. Four hours after the procedure, the tracheostomy tube was accidentally pulled out of stoma owing to patient movement and vigorous cough. This occurred when the attending nurse was trying to replace the tie that was soaked with blood oozing from stoma. Re-insertion of the tube was attempted multiple times, but, without success. There was development of a false passage and blood was oozing from the stoma margin. Before proceeding for an orotracheal intubation, we performed direct laryngoscopy using a paediatric (Macintosh blade size 1) laryngoscope through the tracheal stoma. The surrounding tissue was retracted with magill forceps. Suction was applied to clear the passage from blood. The tracheal stoma and rings were identified under direct vision, and the tracheostomy tube was inserted through it, successfully. This was further confirmed with capnographic tracings.

Accidental extubation of the tracheostomy tube and creation of a false passage on re-insertion are not uncommon events.<sup>2,3</sup> Accidental decanulation during change of tie has been reported in the literature, which requires appropriate precautionary measures.<sup>2</sup> In this patient, blood was oozing of from stoma site during postoperative period, hence, we planned to change the tie. Unscheduled replacement of dislodged tracheostomy tubes may be challenging. Direct visualization of tracheostomy stoma without proper instruments, lighting, and/or suction can be difficult or even, impossible. In such scenario, a paediatric laryngoscope can easily be negotiated via tracheostomy stoma. The light source assists in identifying the tracheal lumen and a space can be created by lifting the trachea anteriorly with laryngoscope blade.

It would be interesting to know whether this technique can also be considered during routine change of tracheostomy tubes. The paediatric laryngoscope may be inserted after the existing tube is withdrawn; thereby keeping the stoma intact. Then, a newer tube is re-inserted, under direct vision, without fear of its passage into a false tract. Nevertheless, the role of direct tracheal intubation under difficult circumstances is not overemphasized, despite an acceptable management of airway in our patient with paediatric laryngoscopy.

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### Rakesh Garg, Girija P Rath

Department of Neuroanaesthesiology, All India Institute of Medical Sciences, New Delhi, India Correspondence : Dr. Girija Prasad Rath E-mail: girijarath@yahoo.co.in

## Rapid Sequence Fiberoptic Intubation (RSFI) : A Potential Airway Management Strategy

Sir,

The anesthesiologist is occasionally confronted with the situation of a patient presenting with both a full stomach, or a possible full stomach, and a difficult airway. A possible strategy for this situation would be to consider combining the typical "rapid sequence induction (RSI)" with the utility of the fiberscope (RSFI) or video laryngoscope.

Thus, the patient would be pretreated with a nonparticulate antacid as well as metoclopromide. The patient may also require an antisialagogue. Nasal decongestants, administered topically with lubricated nasopharyngeal airways, could also be considered prior to induction.

Cricoid pressure would be administered as the patient is rendered unconscious with a suitable intravenous induction agent. Strong consideration would be given for a "test breath" as the patient may later require mask ventilation. Succinylcholine would then be administered.

Tracheal intubation would be subsequently accomplished, with the fiberscope or video larnygoscope, via the oral or nasal route. Use of a fiberoptic-compatible oral airway may be necessary as well.<sup>1</sup>

An appropriate "back up plan" is always required should the patient temporarily need mask ventilation. A laryngeal mask airway (LMA), or an intubating LMA, should be available. Awake intubation may then become a viable alternative if necessary.<sup>2</sup>

This technique would not require "airway blocks" which could potentially interfere with the patient's ability to protect his or her airway. These nerve blocks may also fail thus rendering awake intubation difficult or impossible. Furthermore, the time required to administer the local anesthesia may be excessive depending upon the clinical situation. As previously stated, candidates for this technique would be those in whom fiberoptic intubation, and possible "gentle" transient mask ventilation, could be preformed easily. Use of the Patil-Syracuse mask may also be advantageous.<sup>3</sup>

Also, patients presenting with gastro-esophageal reflux, airway tumors, obstruction, blood, or secretions may not be candidates for RSFI and would probably best be managed with an awake intubation or even an awake tracheostomy.

Clinicians would use their judgment in selecting RSFI as a possible technique. In particular, they should know their limitations with respect to the use of the fiberscope. Alternative airway management strategies have to always be available and considered.

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Glen	Atlas
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Department of Anesthesiology, University of Medicine & Dentistry of New Jersey, NJ 07103, USA. Correspondence : Glen Atlas E-mail : atlasgm@umdnj.edu

# Thoracic Epidural for Modified Radical Mastectomy In a Valvular Heart Disease Patient

Dear Sir,

Patient with valvular heart disease always present an anaesthetic challenge whenever they come for cardiac or non cardiac surgery.<sup>1</sup> We managed one such case under continuous epidural block where surgery lasted for 5 hours.

A 45 yrs old female came for modified radical mastectomy. Patient had dyspnoea on exertion (Grade II) and palpitation. Presently came with fungating ulcer on left sided breast with fixed and retracted nipple. Patient had already received 6 cycles of chemotherapy. On examination Pallor present, pulse rate 62/min irregularly irregular, BP 120/70. On CVS examination S<sub>1</sub> was loud, pansystolic and mid diastolic murmur were present. Laboratory findings were Hb-11.7g%, TLC-5000/mm<sup>3</sup>, DLC-70,25,01,04, BT-2'20'', CT-5'10'', PTI-93.3%, RBS-104mg/dI, blood urea-16mg/dI, serum creatinine-0.7mg/dI, serum sodium-141meq/I, serum potassium-4 meq/I, serum calcium-10mg/

dl, platelets-2lac/mm<sup>3</sup>, ECG showing atrial fibrillation, CXR showing cardiomegaly. Her echocardiography showed moderate to severe MS(valve area 1.16 cm<sup>2</sup>), Mild MR, Mild AR, Mild TR, with PAH (PASP-43mmHg), dilated LA. She was receiving digoxin-0.25mg, spironolactone 25mg, enalapril 2.5 mg and frusemide 20mg once a day. After premedicating with oral alprazolam-0.25mg 2hrs before surgery, inj buprenorphine-0.15mg, inj Phenergan-25mg & inj glycopyrrolate-0.2mg were given 45min preoperatively along with oxygen therapy which continued periopertively also. She was shifted to operating room, Her heart rate increased to 143/min & BP dropped to 96mmHg. Intravenous line was established and I/V digoxin was given. When heart rate settled below 100, thoracic epidural was given at  $T_{6.7}$  level in a sitting position using midline approach. After confirming the space, epidural catheter was introduced, 1.5ml of plain 2% xylocaine was given as test dose. Then on making the patient supine 6 ml of 0.5% bupivacaine was injected slowly till the required effect was achieved from T<sub>1</sub>-T<sub>2</sub>. After that bupivacaine 0.25% infusion was started at the rate of 1.5-2 ml/hr. The dose was adjusted according to vitals & requirement of the patient. Intermittently inj. Midazolam was supplemented. Her vitals remained stable throughout 5 hrs procedure with BP 102-112mmHg, PR 52-62/min, SpO, 98-100%, CVP 6-8 cm H<sub>2</sub>O & urine output 60-70ml/hr. Once during axillary clearance 0.1mg buprenorphine & 2 ml of 2% xylocaine were given as bolus. Post operatively patient was shifted to ICU where she was observed for 48 hrs and the recovery was uneventful.

Cardiac patient coming for non cardiac surgeries can encounter problems such as congestive cardiac failure, pulmonary oedema, atrial fibrillation, tachyarrhythmias, development of ischemia or infaraction.<sup>1,2</sup> Chances of having all these problems increases with increasing surgical time. In order to avoid such complications patient should be optimized before surgery with medical treatment or valve repair surgery. In valvular heart disease keeping the five variables in mind that is (i) preload (ii) after load (iii) myocardial contractility (iv) heart rate (v) rhythm anaesthetic technique can be chosen.1 Our patient had problems of (I) multiple lesions (II) prolonged surgery (III) previous 6 cycles of chemotherapy. Even after premedication, slight touch or stimulation would increase heart rate to 140-150/min. Our dilemma was how this patient is going to behave during stress responses of laryngoscopy & intubation. So we decided to go for GA with thoracic epidural analgesia to reduce the requirement of anaesthetics. But after the placement of thoracic epidural the vitals became so stable that it was decided to go for continuous epidural anaesthesia only. At the same time preparedness for GA was also kept. There are innumerable reports of doing