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## Flow Charts Depicting the Acute Downhill Course of Unrecognized Mediastinal Mass

Uma Hariharan

Anesthesia and Intensive Care, Dr Ram Manohar Lohia Hospital, New Delhi, India

**Corresponding author:** Hariharan U, MBBS, DNB, PGDHM, Fellowship Oncoanaesthesia, Assistant Professor, Anaesthesia and Intensive Care, Dr Ram Manohar Lohia Hospital & Post-graduate Institute of Medical Education and Research, CHS, New Delhi, India, Tel: +91-9811271093; E-mail: uma1708@gmail.com

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in intra-thoracic pressures. A cardiothoracic surgeon opinion should be sought early and femoral vessels may be cannulated prophylactically. Facilities for institution of life support or ECMO [5] (extra-corporeal membrane oxygenation) is desirable in intensive care units caring for patients with mediastinal masses.

### Introduction

Mediastinal masses can have varied presentations or may even remain silent till very late [1]. There have been numerous articles on anaesthetic management of patients with mediastinal masses [2]. There is paucity of literature on acute presentation and course of events following airway interventions in patients with unrecognized mediastinal masses in the emergency or critical care set up. In the event of their presentation as reactive airway disease or acute airway obstruction, the possibility of a mediastinal mass must be kept in mind, when standard medical management fails to improve the condition or when definitive airway management worsens the condition further. A contrast-enhanced computed tomography [3] may be done to diagnose mediastinal masses, if the patient is haemodynamically stable. Positive pressure ventilation [4] can be disastrous as it leads to further increases

### Discussion

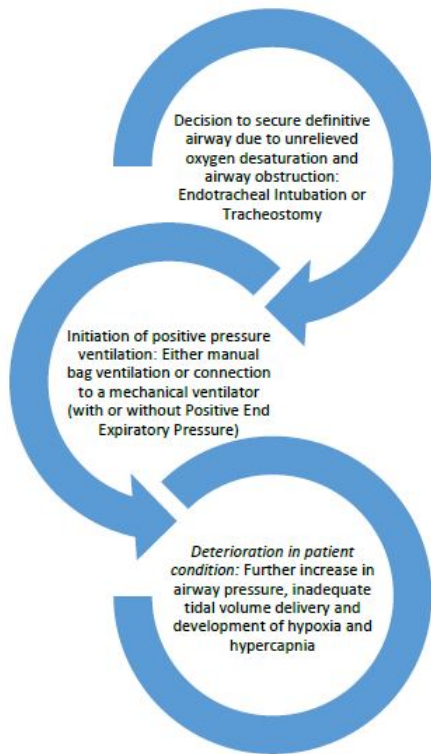
Mediastinal masses can be a great mimic. Their acute presentation can be mistaken for bronchial asthma, COPD exacerbation or subglottic stenosis [6]. A high index of suspicion, eternal vigilance and prompt action can be rewarding in the emergency scenario. This article depicts a concise, lucid and a systematic four-step way to understand the downhill course of airway obstruction due to mediastinal masses. The following set of four flow charts or algorithms (to be read one after the other) summarize the chain of events that can occur after insertion of a definitive airway on the suspicion of airway obstruction in a patient with pre-existing unknown or unrecognized mediastinal mass (**Figures 1-4**):

Signs and Symptoms of airway obstruction suspected

Initial medical management unsuccessful or partial response

Patient continuing to have respiratory distress and oxygen desaturation

**Figure 1:** Flowchart depicting unrelieved airway symptoms in unrecognised mediastinal mass.



**Figure 2:** Flow chart showing decline in patient condition after securing the airway and Positive pressure ventilation.



**Figure 3:** Flow chart highlighting development of cardiac arrest not amenable to resuscitation following increased intra-thoracic pressure.



**Figure 4:** Flow-cycle demonstrating the fatal effects of Positive pressure ventilation in the face of unrelieved airway obstruction in patients with unrecognized mediastinal mass.

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