

Managing the Airway in the Critically Ill Patient

EMERGENT AIRWAY MANAGEMENT

Indications and Methods in the Face of Confounding Conditions

Michael B. Rodricks ¹ MD

Clifford S. Deutschman ^{1,2} MS, MD, FCCM

¹ Departments of Anesthesia (MBR, CSD)

² Surgery (CSD), University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

Address reprint requests to

Michael B. Rodricks, MD

Department of Anesthesia

University of Pennsylvania School of Medicine

Dulles 4/HUP

3400 Spruce Street

Philadelphia, PA 19104

Skillful airway management is the first step in the successful resuscitation of a compromised patient. When faced with an unsecured airway, the clinician has little margin for error. Neurologic damage caused by hypoxia occurs within minutes. Other consequences of airway mishaps include aspiration, airway trauma, ^[61] increased intracranial and intraocular pressure, esophageal intubation, hypotension, hypertension, arrhythmias, ^[31] ^[75] and cardiac arrest.

This article reviews definitive and nondefinitive (temporizing) measures of airway control. Although nondefinitive methods may buy some time for a clinician, ultimately airway control requires tracheal access. The rationale for orotracheal intubation being the preferred route of airway control is described. The pathophysiology of trauma and the consequences of failed, delayed, or improper airway management are discussed. In addition, the physiologic and pharmacologic means of avoiding adverse sequelae while obtaining a secure airway are reviewed.