patient with a suspected difficult airway, we suggest combining preoxygenation with apneic diffusion oxygenation. This can be easily achieved by pharyngeal insufflation of oxygen throughout the period of apnea.7 During apneic diffusion oxygenation, oxygen will diffuse from the lung to the pulmonary capillaries according to its concentration gradient. The oxygen molecules can diffuse from the pharynx into the alveoli, even in the "cannot-intubate, cannot-ventilate" situation, in which the airway may not be completely patent. The combination of preoxygenation and apneic diffusion oxygenation can be particularly advantageous in patients with a suspected difficult airway and in patients with a decreased safety margin secondary to decreased functional residual capacity (FRC) or increased oxygen consumption, or both, such as small children, pregnant women, obese persons, and patients with respiratory distress syndrome.

Anis Baraka, M.D.
Professor and Chairman of Anesthesiology
American University of Beirut
Beirut Lebanon
M. Ramez Salem, M.D.
Chairman
Ninos J. Joseph, B.S.
Research Associate

Department of Anesthesiology
Illinois Masonic Medical Center
Chicago, Illinois
ninosj@aol.com

References

1. Benumof JL, Dagg R, Benumof R: Critical hemoglobin desaturation will occur before return to an unparalyzed state following 1 mg/kg intravenous succinylcholine. Anesthesiology 1997; 87:979-82

(Accepted for publication September 2, 1998.)

Jonathan L. Benumof, M.D.
Professor of Anesthesia
Department of Anesthesia
UCSD Medical Center
La Jolla, California

References


(Accepted for publication September 2, 1998.)

Anesthesiology, V 90, No 1, Jan 1999