Case:

70 y/o man is to undergo cystoscopy and transurethral resection of a bladder tumor under general anesthesia through a laryngeal mask airway. He gave a history of mild asthma and used an albuterol inhaler when necessary. Breathing room air (FI02 = 0.21), his pulse oximeter saturation reading (Sp02) was 94%.

Discussion Questions:

Was this patient hypoxemic?

How do methemoglobin and carboxyhemoglobin affect Sp02 readings?

How should this patient be monitored?

After uneventful inhalation mask induction, cystoscopy was begun and the Sp02 was noted to decrease to 81% with the patient breathing O2 at 2 L per minute and N20 at 3 L per minute. The patient developed respiratory distress. The laryngeal mask airway was easily maintained and no gross secretions were noted. What acute diagnostic and therapeutic interventions would you perform?

What is the difference between shunt, ventilation/perfusion mismatch, and dead space?

What is the differential diagnosis of pulmonary edema?