Severe Pulmonary Hypertension and Femoral Neck Fracture: Attack Plan

Primary Author: Neel Pandya M.D.
Metro Health System

Co-Authors: Michael Bassett, M.D.;

90 year old female presents to ED with right femoral neck fracture after mechanical fall from standing. Other injuries include left rib fractures, left radius fracture and several head lacerations. History reveals compensated heart failure, uncontrolled hypertension, severe pulmonary hypertension on sildenafil and ambrisentan, severe COPD and hypothyroidism. Transthoracic echo revealed ejection fraction of 75% and an estimated pulmonary artery systolic pressure of >108 mmHg. Preoperative pulmonary consult recommended avoidance of general anesthesia as patients post operative risk of respiratory failure was high and patient was at modest risk for post operative cardiac events. In consultation with orthopedic team, anesthetic plan devised which included placement of epidural in the lateral position as patient could not sit up and slow titration of lidocaine in order to provide surgical anesthesia with supplemental versed and a propofol infusion. Management of this patient reviews important anesthetic implications of severe pulmonary hypertension and heart failure while presenting a management plan that includes neuroaxial anesthesia combined with intravenous supplementation.