ABA ORAL EXAMINATION QUESTION – SAMPLE 2

Session 2 - 35 Minutes

A 58-year-old 55 kg woman is scheduled for exploratory laparotomy for ovarian cancer. She smoked 2-2.5 ppd until 2 years ago. Stopped because of increasing dyspnea and exercise intolerance. Uses nasal oxygen for night sleeping and cannot walk more than 30 steps without severe shortness of breath. Meds include albuterol and ipratropium inhalers. She has moderate ascites. BP 130/85 mmHg, P 104, R 18, T 37.4oC, Hgb 14.8 gm/dL. ABG (room air) - pH 7.36, PaO2 54 mmHg, PaCO2 46 mmHg.

PRE-OPERATIVE EVALUATION - 10 Minutes

Analysis of ABGs: How to interpret her ABGs? What is the significance of hypercarbia to anesthetic mgmt? Why is she not acidic? Receive nasal O2 continuously rather than just for night sleeping? Why/why not?

Cardiopulmonary evaluation: Presume last PFTs were done six months ago. Should new PFTs be ordered? Why/why not? Would you get an EKG? Echocardiogram? What specific information do you seek that is not evident from the hx and ABGs? Can you rule out pulmonary infection without sputum culture? How? Why is this an important consideration preop?


Preoperative medications: What medications would you continue/discontinue preop? Why? If extremely anxious, would you provide sedation? Why/why not?

INTRA-OPERATIVE MANAGEMENT – 15 Minutes


Severe bronchospasm, hypoxemia with intubation: Immediately after induction and tracheal intubation, PIP increases to 50 cmH2O. What is your DDx? How will you assess? How to distinguish bronchospasm from endobronchial intubation? Tube obstruction? Pneumothorax? Bilateral wheezing present. How to manage? Compare deep anesthesia vs. albuterol rx. What if hypotension and decreased EtCO2 also present? Rx?


Management of intraop ventilation, ABGs: Would ventilation settings of TV= 550 ml, RR = 16, I:E ratio = 1:1 be appropriate for this case? Why/why not? Your preferred settings? Why? 45 min into case ABGs are PaO2 202 mmHg, (FiO2 1.0), PaCO2 52 mmHg, pH 7.41. Interpret. Would you alter ventilation? How? Why? What if PaCO2 65 mmHg and bilateral wheezing is prominent?

Extubate or ventilate at surgical end: Does early extubation minimize the risk of recurrent bronchospasm? Explain. Recommend overnight postop ventilation for this patient? Why/why not? If ventilated, use IMV or controlled ventilation? Why? At extubation, pulmonologist recommends no supplemental O2 to avoid depression of respiratory drive. Agree? How would you manage?

ADDITIONAL TOPICS – 10 Minutes

Carotid surgery: You evaluate a 60-year-old man scheduled for right carotid thromboendarterectomy for recurrent TIA’s. In PACU following a left carotid TEA 2 wks ago, he had an episode of ST segment depression in leads V4-6 that resolved with intravenous propranolol and nitroglycerin paste. What further information do you require? Why? Any further evaluation prior to surgery? Explain.


Regional anesthesia: A 23-year-old male is scheduled for shoulder arthroplasty. He is terrified of general anesthesia and desires to remain awake. How will you respond? What options are available for anesthesia? Which would you choose? Why? Compare an interscalene vs. supraclavicular block. Advantages/disadvantages. Could this procedure be done with an interscalene block alone? Why/why not?