

Anesthetic Complications Module

Date	Session	M&M Chapters	Speaker
Jan-25	Mechanisms of adverse drug reactions and anaphylaxis	54	<u>Samost</u>
Feb-1	Common Complications Part 1	52, 54	<u>N. Wu</u>
Feb-8	ITE Interlude - Motivation/Self-Regulation		<u>DSK</u>
Feb -22	Common Complications Part 2	54	<u>Y. Low</u>

Mechanisms of Adverse Drug Reactions and Anaphylaxis

Objectives

1. Understand pathophysiology of hypersensitivity reactions
2. Describe clinical management of anaphylaxis
3. Discuss common drug reactions in the OR and the relevant protocols

Case Discussion Questions

1. Your patient is getting an ankle ORIF. They have penicillin listed as an allergy in EPIC. What else do you want to know from them?
2. Anesthesia stat! I just induced my patient and now I see hives. Help! You look at the patient – what do you expect to see? You look at the vent – what do you expect to see? You look at the monitors – what do you expect to see? What should I do to help my patient? What if my patient got a spinal anesthetic? Thanks for saving my patient! Now where do I take them?

Common Complications Part 1

Objectives

Definition/clinical manifestation/treatment of the following:

- Temperature dysregulation
- Bronchospasm
- Laryngospasm
- Postobstructive pulmonary edema
- Aspiration

Case Discussion Questions

1. You are taking care of a patient for a Whipple. The foley is difficult, and urology comes in to assist. By the time the drapes are up and your temperature probe is in, the patient temperature is measuring at 34 degrees Celsius. What is the most effective way to correct this?
2. Your patient is a 72-year-old man with asthma who presents for cystoscopy with fulguration for suspected bladder cancer. He is appropriately NPO but has a raging URI with post nasal drip. What is your plan for his airway and why?
3. You are taking care of a 10-year old girl who fractured her wrist 12 hours ago, shortly after eating breakfast. She has been NPO since then, so you place an LMA. A short while later, you notice vomit in the LMA and the circuit tubing. How do you manage the situation? Why do you think this occurred?

Common Complications Part 2

Objectives

Definition/clinical manifestation/treatment of:

- Residual neuromuscular blockade
- PONV
- Delirium vs Post-operative Cognitive Dysfunction
- Delayed Emergence
- Malignant Hyperthermia

Case Discussion Questions

1. You are doing a robotic prostatectomy with both arms tucked, so you place your twitch monitor over the facial nerve. While they are closing skin, you observe four twitches, so you give an appropriate dose of neostigmine and glycopyrrolate. As you prepare to extubate the patient, you observe a respiratory rate of 35 and tidal volumes of 100. Why do you think this might be? What do you do next?
2. At the beginning of a three-hour procedure, you gave your patient decadron for PONV prophylaxis. 30 minutes prior to emergence, you gave your patient ondansetron and haloperidol as well. They begin vomiting in the PACU. The bedside RN grabs another vial of ondansetron. How effective do you expect this to be? Would this be your plan? If so, why? If not, why not and what is your plan?
3. Your patient is a 27 year old man with schizophrenia who presents for thyroidectomy. An hour into the case, you notice the end tidal CO₂ rising and tachycardia. What is your differential? What studies should you send to evaluate?