PACU Coma: From Baclofen Pump to West African Witches and Wizards!

Moderators: Olubukola Nafiu MD, FRCA, MS and Wilson Chimbira MD, FRCA
Institution: Mott Children's Hospital, University of Michigan, Ann Arbor, Michigan.

Goals
1. Review the epidemiology of perioperative Baclofen use including rising baclofen pump implantation.
2. Review differential diagnoses of PACU coma
3. Recognize the perioperative problems of Baclofen use
4. Discuss the unique issues associated with intrathecal baclofen pump
5. Discuss the management of baclofen toxicity
6. Discuss Baclofen withdrawal
7. History of Physostigmine

Case description:
A 10-year-old boy with moderately severe spastic quadriplegia (due to cerebral palsy) is admitted to the post anesthesia care unit (PACU) following intrathecal baclofen pump revision. The procedure lasted 2 hours and he received 4 mg of morphine for analgesia. Sixty minutes after PACU admission, the boy remains unresponsive, with hypotension (BP = 87/39mmHg), bradycardia (52bpm), and slow respirations (6-8breaths/min). Temperature was 36.8°C. His pupils were of moderate size, but he has global hypotonia and depressed deep tendon reflexes. This PBLD will discuss pathogenesis of baclofen toxicity including unique features of baclofen pump. We will cover tips and current literature on baclofen overdose and withdrawal.

Model Discussion points
1. What is coma? What are some differential diagnoses of PACU coma?
4. What are the pharmacologic advantages of intrathecal baclofen pump?
5. Why is this patient hypotensive?
6. Describe the management of baclofen toxicity?
7. Any known specific antagonist to baclofen?
8. What is physostigmine? How does it work? Dose?
9. Assuming you administer physostigmine and patient improves but relapses 10min later, now what?
10. What are the features of baclofen withdrawal?
11. What is the link between Physostigmine and witchcraft and wizardry in old West Africa?