AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

ACEP'23 Toxicology Section Wednesday, October 11, 2023 Marriott, Level 5, Grand Ballroom G 1:30 - 3:30 PM

MINUTES

THESE MINUTES WERE APPROVED BY THE SECTION CHAIR AND ARE PENDING APPROVAL BY THE TOXICOLOGY SECTION AT THE OCTOBER 11, 2023 MEETING. ANY CHANGES WILL APPEAR IN THE MINUTES OF THAT MEETING

Section officers participating in the meeting included:

Chair: Gerald (Gerry) O'Malley, DO, FACEP Chair-elect: Stella Wong, DO Secretary/Newsletter Editor: Maricel Dela Cruz, DO Councillor: Jennifer Hannum, MD, FACEP Alternate Councillor: Jason Hack, MD, FACEP ACEP Staff Liaison: Cynthia Singh, MS

Attendees: Gerald O'Malley, Stella Wong, Robert Bassett, Maricel Dela Cruz, Richard Chen, Evan Schwarz, Jennifer Hannum, Lindsay Davis, Nick Connors, Jason Hack, Nicholas Hurst, Cynthia Singh

Call to Order

Dr. O'Malley called the meeting to order at 1:39 PM Introductions of attendees were made.

Educational Program: 1:42PM-2:15PM

Dr. Robert Bassett, Associate Medical Director, The Poison Control Center, The Children's Hospital of Philadelphia, Philadelphia, PA presented "Under Pressure: Deciding on Vasopressors vs Insulin for CCB Poisoning".

Presentation Notes:

- 1. Calcium Channel Blockers (CCB)
 - a. Non-Dihydropyridines (Central Acting), diltiazem and verapamil
 - b. Dihydropyridines (Peripheral Acting), ending in "-dipines"
- 2. High-Dose Insulin Treatment for CCB Overdose
 - a. Efficient utilization of energy
 - b. Heart energy utilization transition from Free Fatty Acids (FFA) to Carbohydrates (CHO)
 - c. Secondary messenger system, increase calcium levels and increase inotropy

- d. Ca2+-PIP, bypasses the Calcium Channel Blocker Receptor and uses an alternate pathway for Calcium to pass through; also a possible pathway in other settings of calcium depletion, such as a shock state, hemorrhage, trauma with blood massive transfusion
- e. Affects L-type Insulin Channels
- 3. Peripheral Calcium Channel Blockers cause vasodilatory shock
 - a. In overdose, calcium channel blockers lose specificity and lead to effects on central acting receptors
 - b. Regarding high dose insulin, vasodilation comes from endothelial nitric oxide, causing dilation of the vessel; in the microcirculation, this an cause further vasodilatory effects
- 4. Possible use of Cardiac Ultrasound
 - a. If there is decreased output contractility, centrally, consider high dose insulin treatment
 - b. If there is a hyperdynamic heart or increased output contractility, centrally, consider holding off on high dose insulin treatment, need treatment of vasodilatory effects of CCB instead
- 5. Treatment of vasodilatory effects includes vasopressor support, stress dose steroids
 - a. Consider Giapreza, Angiotensin II, a vasoconstrictor that helps increase blood pressure in the setting of distributive shock; renin angiotensin axis
 - b. Other antidotes include methylene blue, hydroxocobalamin endothelial nitric oxide scavengers, reducing agents
 - c. Additional treatment includes lipid emulsion therapy and ECMO
- 6. Recalcitrant vasoplegic shock, consider "low dose high dose insulin therapy", decrease nitric oxide output, at 0.1 U/kg/hr

Dr. O'Malley praised Dr. Bassett for an engaging and excellent presentation. Questions were asked and answered.

Old Business: 2:15PM Section Minutes of November 2, 2022, were approved.

New Business: 2:16PM

Election of the following new officers for 2023 - 2025:

Based upon the results of the online voting survey the following positions were approved:

- Chair-elect: Dr. Richard Chen
- Secretary/Newsletter Editor: TBD (This item was tabled by the group as there were no candidates for this position. Drs. Wong and O'Malley are working to nominate a new candidate to fill this position).
- Alternate Councillor: Dr. Evan Schwarz
- Councillor: Dr. Jennifer Hannum

Appointment of New Chair – Dr. Stella Wong was appointed the new Toxicology Section Chair

Councillor and Board Liaison Reports

Jen Hannum, Councillor, reported on Council resolutions related to the Toxicology Section:

- Council meets the weekend before the ACEP meeting
- Representatives gather from each section and each state
- Two days of meetings, review resolutions that ACEP works on and subsequently votes on
- There were 5 resolutions associated with the Toxicology Section:
 - 1. Resolution 24: Pediatric Cannabis Exposure Product Packaging (adopted)
 - 2. Resolution 25: Compassionate Access to Medicinal Cannabis (not adopted)
 - 3. Resolution 26: Decriminalization of all illicit drugs (not adopted)
 - 4. Resolution 46: Statement on Pregnant Women and Substance Abuse (supported)
 - 5. Resolution 47: Excited Delirium Syndrome (requires further development)

Presentation of Certificate of Appreciation to Outgoing Chair – Gerald O'Malley, MD

Dr. Jen Hannum presented Dr. O'Malley with his outgoing chair award and thanked him for his outstanding service and contributions to the Toxicology Section for the 2021-2023 period.

Presentation of Honorable Mention Outstanding Newsletter Award – Maricel Dela Cruz,

DO, Secretary/Newsletter Editor

Dr. O'Malley presented Dr. Maricel Dela Cruz with her certificate for her outstanding service and contributions to the Toxicology Section for the 2021-2023 period.

Other New Business / Open Floor:

A. Discussion of Antidote App

Jennifer Hannum provided updates on the build of the antidote app.

- a. App Development
- b. Budget
- c. Possible collaboration with EMRA (Tox Section)
- B. Dr. Jason Hack discussed MD Calc "Hack's Impairment Index" (HII)
 - a. Utilize for patients intoxicated of alcohol
 - b. Track and monitor symptoms of impairment in patients presenting to the ED with alcohol-induced impairment
 - c. Serial assessments, can be nursing lead
- C. Dr. Gerald O'Malley discussed raising idea to ACEP, Emergency Medicine Psychiatry Fellowship; possible resolution
 - a. Additional training for emergency medicine trained physicians
 - b. Psychiatric fellowship

Adjourn

The meeting was adjourned at 2:54 PM