CONSULTANTS

Current HLCs (25)

Recently Retired (7)

• Thomas Kozhimmannil
• Gregory McHugh
• Agi Melton
• Henry Rosenberg
• Margaret Weglinski
• Ronald Litman
• Jerry Parness

New Consultants (5)

• Christopher Edwards (U Florida)  June 2019, Mentor: Sivak
• Christopher Heine (MUSC)  June 2019  Mentor: Theroux
• Cheryl Gooden (Yale)  January 2020  Mentor: Watson
• Sandra Gonzalez (U Florida)  March 2021  Mentor: Sivak
• Robert Shaw (U Wisconsin)  March 2021  Mentor: Litman
RECENT INITIATIVES

- Caller and Consultant Surveys Sept 2020
- Caller Email May 2020
- COVID survey and Letter to ASA June 2020
- COVID and MH Webinar Feb 2021
- Open Anesthesia/SPA “Ask the Expert” Podcast March 2021
- Hotline Committee March 2021
- Case of the Month Educational Series (Virtual) May 2021
CONSULTANT SURVEY

Demographics: Age, weight, Gender (if different from sex assigned at birth)

**Diagnosis** (likelihood of MH)
**Should an AMRA be filed?**
**Brief synopsis**
Flagged for review as Teaching case (typical) or Challenging/Interesting case (atypical)

Personal/family history of MH
**Case details:** surgery type, anesthetics, intubation/ventilation, vitals (max HR, temp, ETCO2), metabolic acidosis, MMR, rigidity, arrhythmia

**Treatment:** Charcoal filters, dantrolene (which type), effect of dantrolene
CONSULTANT SURVEY RESULTS

Sent: 264
Returned: 102 (38%)

Top Completers
E Sivak (24), A Beilsky (19), T Pinyavat (16), C Watson (9)

Diagnosis:
11 Possibly MH, 3 Strongly Suspect MH
16 AMRA should be filed
46 yo female for robotic hysterectomy (PMH hypothyroid, anxiety, renal tubular acidosis, GERD, kidney stones, Asthma and IGA deficiency) induced with versed, fentanyl, propofol and rocuronium then added sevo. Within minutes of induction temp up to 38.8 and then 39.4 - all prior to any incision or prep of the patient. Surgery was cancelled. Dantrolene given. ABG 7.29/30.4/147/14.2 BD -10.9 K 3.8. ...Plan was to go to ICU. While the very rapid rise of temperature is very concerning for MH, without more history about RTA unclear what her normal bicarb level is. Certainly had no elevation of CO2, but very low bicarb and significant BD.

E Sivak
CALLER SURVEY CONTENT

Reason for call
Was your question answered?
How long did it take to connect to a consultant?
Did consultant aid in differential diagnosis?
How helpful was the HLC?
Did the HLC make you feel more confident/comfortable with your management and diagnosis?
What is the current working diagnosis? Other information since call?
Referral for biopsy or genetic testing?
CALLER SURVEY - RESULTS

Sent: 269
Returned: 46 (17%)
Answers all the way back to 2013

Timeliness:
- 5 min or less (71%),
- 5-10 min (26%)
- > 10 min (<1%)

Service:
- Extremely helpful (71%)
- Very helpful (24%)
- Somewhat and Not (<1%)
CALLER SURVEY

• "We used the MH App for iPhone to manage a pediatric case with a suspected crisis that resulted no MH. Dr. Litman was the Hot Line consultant. He was extremely helpful and friendly guiding us with the differentials."

• "Appreciate consultation. Dantrolene avoided after reviewing ABG and mixed picture."

• "This is my second time calling the hotline in residency and it has been a pleasant, informative experience that has helped me better care for critically ill patients both times. Thank you kindly"
CALLER SURVEY

A valuable service that is always helpful. This is the second time I have called during a 20 yr Career

Dr. Watson was excellent. He made the correct diagnosis of hypermetabolic syndrome due to patient taking anabolic steroids. Many, but not all signs, were similar to MH. Also, he was not on call, but the back up call person when they could not reach the call person. Please don't let him retire! What a resource for the ASA.

Surgeons were concerned pt had MH due to high temperature and wanted to give danteolene just in case. We (anesthesiology) thought it was likely iatrogenic +/- inflammatory given normocarbia. It was helpful to get a third opinion from the MH hotline who reassured us that it was unlikely MH.
REGISTRY CONNECTION

Kristee identified 19 calls since Aug 2020 to be added to registry

- 2/19 of the calls made it to the registry
- 13/19 calls we have been unable to get in touch with the caller
- 4/19 we have emails out to with no response yet
HOTLINE CALLS AND COVID-19

- Volume of calls paralleled COVID peaks
- Typical scenario:
  "50-70y M, COVID Pneumonia, received succinylcholine 2 days to 1 week ago, high fever, how to dose dantrolene"
- Male, Obesity, Diabetes Type2, Renal failure
HOTLINE CALLS AND COVID-19

- First 10 cases surveyed consultants and reported in letter to ASA President
- Calls asked about dosing Dantrolene
- Advice: Non-specific antipyretic: it can bring temperature down regardless of cause of fever, but has many potential downsides/ side effects
- Outcome of cases unknown
WEBINAR and PODCAST

COVID-19 and MH

Dr. Teeda Pinyavat
MHAUS MH Hotline Director
Assistant Professor of Anesthesiology
Columbia University

Malignant Hyperthermia and the MH Hotline

March 2021: Dr. Teeda Pinyavat and OpenAnesthesia Editor Dr. Aditee Ambardekar discuss malignant hyperthermia and the MH Hotline.
HOTLINE COMMITTEE

Chair: Teeda Pinyavat
Members:
Charles Watson
Mohanad Shukrey
Harvey Rosenbaum
Erica Sivak

Ryan Hamlin
Richard Kaplan
Dorothea Hall
Christopher Edwards

Mission:
• Support current consultants
• Creation of educational materials for consultants
• Bi-annual HLC/PAC meeting planning
• Quality control and standardization of consultations
Consultant Concerns/Ideas

**Data collection** - Easier and more accurate ways to gather data? Few questions asked by medic alert at the end of call? What data are we looking at? What questions do we want to answer?

**Post episode Outcomes and Follow-up**
Consultant Concerns/Ideas

Quality Assurance
Standardized messages - “E-statements” sent to callers as triggered by HLCs, recommended blurbs vetted by advisory committee (dantrolene dosing, lab testing, rhabdo diagnosis, neurology workup, how to file AMRA) – sent in real time during or immediately after the call via text or email, hot button on website?

Communication and Education
Revive “Case of the Month”
Periodic hotline reports in Communicator

Bi-Annual Meeting
Still not permitted to travel, postpone until 2022.
Replace with more frequent zoom Education/QA meetings