

EPIC

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COLLEGE OF EMERGENCY PHYSICIANS

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GCEP Winter Government Affairs Update

Travis Lindley & Devin Krecl - December 2022

2022 Elections Update

The 2022 Elections were held, Tuesday November 8 with 43 new State House members elected along with 10 new members in the State Senate.

47 of the House members elected in 2020 will not be back for the 2023 session. In addition to the 43 elected last week, that includes 2 House members who left in 2021 (Bert Reeves and Greg Morris) and 2 House members who died over the 2-year session (Mickey Stephens of Savannah and Wayne Howard of Augusta).

Altogether then, slightly over a quarter of the House members sworn in this January were not serving 2 years previously, at start of 2021 session.

Gerald Greene of southwest Georgia (District 154) becomes the new "dean" of the House---he was first elected in 1982---and replaces Rep. Smyre of Columbus for that position.

Lastly, with the recent passing of longtime Speaker of the House and true statesman, David Ralston, there will be a special election held on January 3, 2023. The speaker's wife, Sheree, is running to fill the vacant position.

2022 Senate and House Leadership Updates

Senate

President Pro-Tempore - Sen. John F. Kennedy
Majority Leader - Sen. Steve Gooch

House

Speaker of the House - Rep. Jon Burns
Speaker Pro-Tempore - Rep. Jan Jones
Majority Leader - Rep. Chuck Efstration

Current State of Affairs

GCEP leadership and the legislative team are at work on many fronts with our State Agencies, Legislators, and Regulators. It has been a busy Fall/Winter and anticipate a busy 2023 Legislative Session. As a reminder, the 2023 legislative session will begin on Monday, January 9, 2023 and conclude sometime the last week of March or first week of April.

GEMPLAC 2022

The GCEP legislative team and GCEP leadership worked diligently to host a great 2022 GEMPLAC conference. The following legislators joined us in December to discuss a recap of the 2022 Legislative Session and 2023 Legislative Priorities:

- o Sen. Michelle Au, MD – Senate Health Committee
- o Sen. Kay Kirkpatrick, MD - Senate Health Committee
- o Sen. Nan Orrock - Senate Health Committee
- o Rep. Sharon Cooper – House Health Committee Chair
- o Rep. Demetrius Douglas – House Health Committee
- o Rep. Lee Hawkins - House Health Committee
- o Rep. Spencer Frye - House Health Committee
- o Rep. Houston Gaines - House Health Committee
- o Rep. John LaHood – House Health Committee
- o Rep. Jodi Lott – House Health Committee & Administration Floor Leader
- o Rep. Mark Newton, MD – House Health Committee

2023 Hot Issues/Topics

- **Surprise Billing Update re: Arbitration**
- **Insurance Reform – Network Adequacy**
- **Prior Authorization**
- **PBM Reform**



Be a part of the action! Join the PAC! (Click the icon above)

Our PAC needs your help to fully engage in the political process & support our friends
Please renew your membership today!



Looking Ahead

The GCEP legislative team will continue to provide regular updates as the 2023 GA Legislative Session gets underway. Please call them with any questions.

Government Affairs Team

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PLANNING ESSENTIALS

How Offsetting Gains Work

In an ideal world, the stock market would continue to gradually climb. Inflation would be steady at 2%. Unemployment would be low and every one of our investment choices would pay off. However, this is the real world—where markets fluctuate (sometimes wildly) and periodic downturns are inevitable.

No one really enjoys experiencing investment losses. In fact, behavioral finance studies have found that the psychological pain associated with a loss has been measured to be more than 2x the pleasure experienced with a gain.¹ However, in some cases, losses can actually be beneficial to your overall financial picture—a way to gain a valuable tax benefit.



KEY TAKEAWAYS

Each year, investors have the opportunity to use realized losses to help offset realized capital gains.

If your realized losses exceed your realized gains, up to \$3,000 of additional losses can be used to offset up to \$3,000 of ordinary income each year on your joint tax return.

Any additional investment losses can then be carried forward into future tax years to help offset future gains and income.

There's a specific process that should be followed when offsetting gains with losses. Any investment sale can have unexpected tax implications, so plan carefully with your financial advisor and tax specialist.

PUTTING INVESTMENT LOSSES TO WORK

Realized investment losses (securities sold for less than their cost basis) can essentially serve two vital purposes. They can be used to offset your investment capital gains, as well as up to \$3,000 of ordinary income each year on your joint tax return. Any unused losses can then be carried forward indefinitely into future tax years.

‘Harvested losses,’ therefore, may help to significantly lower tax obligations and provide investors with more money in their pockets. However, in order to avoid any missteps that might negate these important tax benefits, it’s important to closely work with both your financial advisor and tax specialists who can help you not only comply with the IRS’ Wash Sale Rule, but ensure that you properly apply any losses to offset gains.

APPLYING LOSSES TO OFFSET GAINS

When offsetting gains, realized gains and losses can be put into one of two categories:

- **Long-term gains and losses**—any investment held for more than one year. Long-term capital gains are taxed at a separate rate (either 0%, 15% or 20% depending on your income and filing status).
- **Short-term gains and losses**—any investments held for exactly one year or less. Short-term capital gains are taxed as ordinary income (depending on your income subject to a top marginal tax rate of 37%).

Gains and losses in each category can be matched up using the following sequence:

1.
All long-term losses must first be used to offset long-term gains; and all short-term losses must first be used to offset short-term gains.
2.
Any excess losses that remain in one category can then be applied to the other.
3.
If you have any leftover unused losses (i.e., your combined total losses for the year exceed your combined total gains), those can be carried forward to offset gains in future tax years.

To better understand this process, let’s examine a hypothetical example. At the end of the year, you calculate that your stock sales have generated \$18,000 in gains and \$25,000 in losses broken down this way:

• \$10,000 in short-term gains;
• \$5,000 in short-term losses;
• \$8,000 in long-term gains; and
• \$20,000 in long-term losses

First, you should offset your net short-term gains with losses (\$10,000 – \$5,000) which nets you a \$5,000 short-term capital gain. Similarly, you’ll want to offset your net long-term gains with long-term losses (\$8,000 – \$20,000), leaving you with an additional \$12,000 in long-term capital losses. You can then use \$5,000 of your remaining \$12,000 in long-term losses to offset the leftover \$5,000 in short-term gains.

This process would not only eliminate all your capital gains for the year, it would leave you with \$7,000 in long-term losses—\$3,000 of which you could use to offset ordinary income, and the remaining \$4,000 carried forward as a long-term capital loss to be used in subsequent tax years.

PLAN THOUGHTFULLY BEFORE HARVESTING LOSSES

Keep in mind that whenever you sell investments, you'll need to pay taxes on any realized capital gains. The IRS, however, is only concerned with 'net gains' for each tax year—how much your total gains exceed your total realized losses. So, if you know you're going to incur significant gains in a particular year, consider exploring ways to capture portfolio losses to offset some of those gains.

Annual portfolio rebalancing can help—affording you an opportunity to sell shares of stocks, mutual funds and ETFs which have lost value since you acquired them and replace those securities with similar but not 'the same or substantially identical' securities. Once again, given the potential tax impact, make sure you talk with both your financial advisor and tax specialist before engaging in any sales transactions.

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SMRU 5103645.2 (Exp. 11/30/2024)



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Emory University School of Medicine Department of Emergency Medicine

The Emory EM Residency

The Residency Team is excited to welcome Dr. Jeffrey Siegelman as the Interim Program Director at the end of February. Dr. Siegelman has been taking the lead during residency recruitment to ensure all applicants have an opportunity to engage with him and the residency team. Dr. Melissa White will be working with Dr. Siegelman over the next couple months as she transitions out of the director position. Dr. White was a resident at Emory, an EMS fellow, the Medical Director for Grady EMS, and before becoming the Residency Director she served as an APD. Dr. White will continue to find ways to contribute to the Emory EM team and we know that wherever she jumps in next we will see great things happen. She is leaving the residency in the hands of an outstanding leadership team that will continue to provide residents with an exceptional education in EM.

Residency Awards and Appointments

- **Dr. Jamie Kuck, PGY3**, received the 2022 Georgia College of Emergency Physicians In Training Professionalism and Service Award. The award was presented at the Georgia Emergency Medicine Leadership and Advocacy Conference in December
- **Dr. Jamaji Nwanaji-Enwerem** has a Grantee Highlight for the National Institute of Environmental Health Sciences
- **Dr. Kimberly Herard** is an EMRA Board Member-at-Large

Congratulations to the Emory EM Residency Fellowship Matches:

Dr. Kimberly Herard, Ultrasound @ Emory University

Dr. Prem Menon, Global EM @Brigham and Women's Hospital

Dr. Mustafa Rasheed, Anesthesia Critical Care @Columbia University

Dr. Farina Shafqat, Anesthesia Critical Care @ Washington University in St. Louis

Dr. Emily Smith, EMS @ University of Texas at Austin

Dr. Reena Underiner, EMS @ Boston University Medical Center

Emory EM Announcements, Accomplishments, and Awards

We are excited to announce that **Dr. Daniel Wu** is the new Chief of Emergency Services at Grady Memorial Hospital. Dr. Wu served as the Interim Chief and Medical Director of the Emergency Care Center for the past year.

Congratulations to **Dr. Vanessa Fields**, she is the new Assistant Medical Director for Emergency Medicine at Emory University Hospital Midtown.

The Southern Regional Disaster Response System is organizing a Radiological and Nuclear Emergency 6-Part Webinar Series. The next webinar is on Jan. 21 focusing on Resources for Healthcare Systems and Public Health Planners. Register here:

https://zoom.us/webinar/register/WN_Q6N4kOA6Tb6jPyIIOH_pMQ.

Emory EM will have our first Health Policy fellow starting in 2023. Dr. Naomi Newton is currently Chief Resident at University of Miami-Jackson Memorial Hospital.

Dr. Michael Carr and **Dr. Laura Oh** were recognized by the Emory School of Medicine on Researcher Appreciation Day for their innovation and groundbreaking research.

Dr. Sheryl Heron joined the Georgia Chamber of Commerce for GADEI22 and spoke about the Intersection between DE&I and Mental/Physical Health.

On December 12, a collaborative Envenomation Exercise was organized around a Cape Cobra snake bite at Zoo Atlanta preparing everyone involved for future emergencies. This was a successful tox exercise with Zoo Atlanta, Georgia Poison Center, Grady Health, and the Emory EM Tox Team. We are thankful for partnerships around Atlanta.

Dr. Ziad Kazzi visited the Emergency Medicine Residency Program in Tbilisi Georgia and presented on medical toxicology. The Georgian residency program was created with the support of Emory EM through funding from USAID.

Dr. Kiad Kazzi, Dr. Emily Kiernan, Dr. Brent Morgan, Dr. Jonathan de Olano, Dr. Anna Yaffee, and International Med Tox Fellow Dr. Hassan Al Balushi presented at the International Medical Toxicology Conference in Turkey.

Colonel Julio Lairet, MD, retired from the US Air Force and Air National Guard after over 30 years of service!

Emory SOM Faculty Excellence Awards

o Full Professor: Joshua Wallenstein, MD and Daniel Wu, MD

o Associate Professor: Megan Henn, MD; Lauren Hudak, MD, MPH; Kristen Grabow Moore, MD; Jonathan Ratcliff, MD, MPH; Anna Yaffee, MD, MPH

o Hidden Gem: Andres Patino, MD

o Dean's Teaching Award: Jason Liebrecht, MD

o Distinguished Service Award: Warren Perry, MD; Philip Shayne, MD

o Clinical Distinction Awards: Eliot Blum, MD; Selin Caglar, MD; Douglass Chesson, MD; Shamie Das, MD, MPH; Iyesatta Emeli, MD; Anwar Osborne, MD; Andrew Pendley, MD; Tricia Smith, MD, MPH

o Regional, National and International Awards: Eliot Blum, MD, SAEM; Katrin Gipson, MD, MPH: NMA and SAEM; Colonel Julio Lairet, DO: U.S. Air Force and Air National Guard; Yuko Nakajima, MD: Medecins Sans Frontieres Japan; Laura Oh, MD, PhD: Accreditation Council for Graduate Medical Education, ACEP; Tricia Smith, MD, MPH: NMA

New Grants and Appointments

Dr. Joe Carpenter and **Nicholas Giordano** received a CDC R01 grant award for LINC-S-UP to Develop or Identify Effective Strategies to Prevent Overdose Involving Illicit Stimulants and Polysubstance Use Involving Stimulants. Results will inform other EDs considering a peer recovery coach program for patients presenting with SUD-related conditions.

Emory University and the Grady Health System were awarded \$4.4 million to study Atlanta car crashes over five years.

Dr. Greg Helland is a newly elected Alternate Councilor for ACEP's Emergency Ultrasound Section

Publications and Television

Fall 2022 Emory School of Medicine Magazine: Recalibrate, the Making of a Tactical Physician featuring **Dr. Jeremy Ackerman, Dr. Lauren Hudak, and Dr. Mark Rosing**.

In Science Direct, under Wilderness and Environmental Medicine, **Dr. Ethan Meisel, Dr. Brent Morgan, Dr. Ziad Kazzi** published Two Cases of Severe Amanita Muscaria Poisoning Including a Fatality.

In Clinical Toxicology, **Dr. Joe Carpenter, Dr. Matthew Eisenstate, Dr. Emily Kiernana, Dr. Brent Morgan, Dr. Daniel Noguee, Dr. Colin Therriault, Dr. Michael Yeh** published Veratrum parviflorum poisoning: identification of steroidal alkaloids in patient blood and breast milk

Dr. Tim Moran is a co-author on Frontiers | Use of Person-Centered Goals to Direct Interdisciplinary Care for Military Service Members and Veterans with Chronic mTBI and Co-Occurring Psychological Conditions ([frontiersin.org](https://www.frontiersin.org))

Emory EM Resident **Dr. Nwanaji-Enwerem** and **Dr. Anwar Osborne** published this op-ed in the Atlanta Voice on Anticipating Illness and Preventing Disease

Atherine Abiri, DNP, ENP-C, Matthew Keadey, MD, MHA, George Hughes, MD, Stephen R. Pitts, MD, Tim P. Moran, PhD, Michael A. Ross, MD. **The Impact of Virtual Care in an Emergency Department Observation Unit. Annals of Emergency Medicine**. Published: October 15, 2022 DOI: <https://doi.org/10.1016/j.annemergmed.2022.07.003>

Dr. Bryan McNally is a co-author on a new NEJM study about Racial and Ethnic Differences in Bystander CPR for Witnessed Cardiac Arrest. The news story is here: https://news.emory.edu/stories/2022/10/hs_new_research_racial_ethnic_disparities_bystander_CPR/story.html

Dr. Amy Zeidan is a co-author in AEM's Journal of Emergency Medicine on Post-Roe emergency medicine: Policy, clinical, training, and individual implications for emergency clinicians. She also participated in the first free, online, peer-reviewed course in asylum medicine titled the Asylum Medicine Training Initiative. Dr. Zeidan worked on the course with 2 Emory SOM students.

Dr. Katrina Gipson on WXIA discussing the wait times on the rise in Atlanta's EDs: <https://www.11alive.com/article/news/local/metro-atlanta-hospital-wait-times-on-rise/85-de41e056-c25f-469c-8976-446c45c649d8>

Dr. Gipson was also on WXIA for "Health officials warn of measles outbreak, call it an 'imminent threat' globally:" <https://www.11alive.com/article/news/health/health-officials-warn-measles-threat/85-ee961b62-fdef-41d1-8161-ffed0f89fb36>

Toxicology Case of the Month: Herbal Supplement Withdrawal Mimicry

Alyka Glor Fernandez, DO¹, Nicholas Titelbaum, MD^{1,2}, Emily Kiernan, DO^{1,2}

¹Emory University School of Medicine, Department of Emergency Medicine

²Georgia Poison Center

Case

A middle-aged female was brought in by ambulance to the Emergency Department (ED) with nausea, vomiting, and diffuse myalgias. She had a past medical history of Ehlers-Danlos syndrome, dissociative identity disorder, and bipolar disorder. During the initial assessment, she had poor memory and could not explain what brought her into the ED, nor give specifics about her medical history or home medications. Her initial vital signs were significant for: heart rate 106, blood pressure 140/94. She was afebrile with normal respiratory effort and oxygen saturation on room air. She had a flat affect, was inattentive, and seemed to respond to internal stimuli. Her speech was tangential, and she had a non-linear thought process. Her physical exam was otherwise unremarkable. A workup was performed and included: complete blood count, complete metabolic profile, urine drug screen (UDS), urine analysis, gonorrhea/chlamydia urine test, serum co-ingestants (acetaminophen, aspirin, and ethanol), and serum pregnancy test, which was only remarkable for a positive UDS for amphetamine.

Psychiatry was consulted for altered mental status and history of mental health disorders. She admitted to over-use of her amphetamine/dextroamphetamine extended release (XR) but could not confirm her medication list. Her mother reported a home medication list of opioids, methocarbamol, gabapentin, ibuprofen, alprazolam, lamotrigine, ziprasidone, and benztropine. The psychiatrist noted a fluctuating level of consciousness, periods of confusion, inattention, paranoia, and splitting behaviors. She did not meet criteria for involuntary psychiatric hold or inpatient psychiatric care. She was admitted to the medicine service for further evaluation.

The toxicology team was consulted through the Georgia Poison Center for her over-use of amphetamine/dextroamphetamine XR. The patient confirmed using her and her brothers' prescriptions. The toxicology team suspected that her paranoia and response to internal stimuli could be due to amphetamine intoxication and that the XR formulation could have contributed to her prolonged altered mentation. She denied taking her other prescription medications. On review of her prescription drug monitoring program (PDMP) for the past year, she occasionally received hydrocodone prescriptions for chronic pain. The patient admitted to using kratom for her chronic pain over the past four years and that she ran out in the past few days. Since then, she had been experiencing nausea, vomiting, diffuse myalgias, agitation, and anxiety. Her exam was remarkable for a Clinical Opiate Withdrawal Scale (COWS) (Table 1), a scoring tool designed for clinicians to assess the severity of patients' opiate withdrawal and physical dependence on opioids, of 11, concerning for mild opioid withdrawal.

Table 1. The Clinical Opioid Withdrawal Scale

Criterion	Scoring
Resting heart rate: record beats per minute (bpm), measured after patient is sitting or lying for 1 minute	0 = heart rate 80 bpm or below 1 = heart rate 81 – 100 bpm 2 = heart rate 101 – 120 bpm 4 = heart rate greater than 120 bpm
Sweating: over past 1/2 hour not accounted for by room temperature or patient activity	0 = no report of chills or flushing 1 = subjective report of chills or flushing 2 = flushed or observable moistness on face 3 = beads of sweat on brow or face 4 = sweat streaming off face
Restlessness: observation during assessment	0 = able to sit still 1 = reports difficulty sitting still, but <u>is able to do so</u> 3 = frequent shifting or extraneous movements of legs/arms 5 = Unable to sit still for more than a few seconds
Pupil size	0 = pupils pinned or normal size for room light 1 = pupils possibly larger than normal for room light 2 = pupils moderately dilated 5 = pupils so dilated that only the rim of the iris is visible
Bone or joint aches: if patient was having pain previously, only the additional component attributed to opioid withdrawal is scored	0 = not present 1 = mild diffuse discomfort 2 = patient reports severe diffuse aching of joints/muscles 4 = patient is rubbing joints or muscles and is unable to sit still because of discomfort
Runny nose or tearing: not accounted for by cold symptoms or allergies	0 = not present 1 = nasal stuffiness or unusually moist eyes 2 = nose running or tearing 4 = nose constantly running or tears streaming down cheeks
GI upset: over last 1/2 hour	0 = no GI symptoms 1 = stomach cramps 2 = nausea or loose stool 3 = vomiting or diarrhea 5 = multiple episodes of diarrhea or vomiting
Tremor: observation of outstretched hands	0 = no tremor 1 = tremor can be felt, but not observed 2 = slight tremor observable 4 = gross tremor or muscle twitching
Yawning: observation during assessment	0 = no yawning 1 = yawning once or twice during assessment 2 = yawning three or more times during assessment 4 = yawning several times/ <u>minute</u>
Anxiety or irritability	0 = none 1 = patient reports increasing irritability or anxiousness 2 = patient obviously irritable / anxious 4 = patient so irritable or anxious that participation in the assessment is difficult
Piloerection (gooseflesh skin)	0 = skin is smooth 3 = piloerection of skin can be felt 5 = prominent piloerection
Total score	<u>5 – 12</u> = mild; 13 – 24 = moderate; 25 – 36 = moderately severe; >36 = severe withdrawal

What is kratom?

Kratom is prepared from the leaves of the Southeast Asian plant *Mitragyna speciosa*, which is in the coffee (Rubiaceae) family.¹ In Southeast Asia, it has been long used for its medicinal and stimulant effects by agricultural laborers. In the United States, it is widely available for purchase as an unregulated herbal supplement and is also labeled as Krypton, K2, and spice.² Kratom contains indole alkaloids, the most notable of which are mitragynine and 7-hydroxymitragynine. Mitragynine is the active component of kratom. Mitragynine is a partial mu opioid agonist. At low doses, it acts as a stimulant, while at higher doses, its opioid-like effect predominates. 7-Hydroxymitragynine is a minor component of kratom but has opioid activity that is more potent than morphine.³

Why do people use kratom, and what are its clinical effects?

While kratom is legal in most states, it has no FDA-approved uses, and the FDA has warned consumers not to use kratom products pending further evaluation of its safety.² Studies have shown that patients use kratom for multiple reasons, most notably to treat pain, to abstain or mitigate dependence from prescription and illicit drugs, and to manage opioid withdrawal symptoms. Regular users have reported dependence, craving, and withdrawal symptoms.³ The most commonly reported adverse effects are agitation, tachycardia, drowsiness, vomiting, and confusion with severe adverse effects including seizure, withdrawal, hallucinations, respiratory depression, coma, and cardiopulmonary arrest.⁴ One study found that these adverse effects are not dose-dependent, although further investigation is needed.⁵

Since 2012, the FDA has monitored kratom and kratom products due to concerning reports about the safety of kratom use. In addition to uncovering misleading marketing about unproven medical properties, the FDA has found kratom and kratom products contaminated with heavy metals and salmonella. The FDA conducted a laboratory analysis of thirty different kratom products and found dangerously high levels of lead and nickel that exceed safe exposure for daily intake, which could lead to heavy metal poisoning.⁶ Contamination of kratom products with salmonella has led to multiple product recalls with some consumers requiring hospitalization.⁷ In addition to the potential adverse effects of kratom itself, harmful contaminants may be present in products labelled “kratom” due to the lack of regulation, further highlighting the potential dangers of this substance.

As of March 2021, only one controlled human laboratory study of kratom has been published. The study found that the pharmacokinetics of mitragynine are linear and follow the two-compartment model with a long terminal half-life of about 24 hours. Additionally, the authors of the study proposed that mitragynine likely undergoes hepatic metabolism.⁸ More information about the pharmacological effects and epidemiological scope of kratom is needed.

How should people with kratom use disorder be managed?

Kratom-related substance use disorder can be diagnosed using the DSM-5 Diagnostic Criteria for Diagnosing and Clarifying Substance Use Disorders.⁹ Currently, there are no guidelines for treatment of patients with kratom use disorder. However, patients with kratom dependence who present with signs and symptoms of opioids withdrawal can be treated as opioid use disorder, and thus may be candidates for medication-assisted opioid treatment (MAOT). A systematic review of kratom use disorder and treatment with MAOT proposed that “patients using <20 grams of kratom daily could be initiated on opioid agonist therapy with 4/1 mg-8/2 mg buprenorphine-naloxone daily, while patients using kratom doses >40 grams a day could be initiated with 12/3 mg-16/4 mg of buprenorphine-naloxone daily.”¹⁰

Case conclusion

Our patient, who reported regular use of kratom for four years, showed clinical signs of opioid withdrawal. Given her initial altered mentation, our toxicology team felt that she could not consent to starting treatment with buprenorphine/naloxone. Thus, we recommended supportive treatment of her withdrawal symptoms with the following medications:

- diazepam 10mg PO once at bedtime
- ketorolac 15mg IV every 6 hours as needed for pain
- acetaminophen 1,000mg PO every 6 hours as needed for pain
- loperamide 2mg PO every 1 hour as needed for diarrhea
- ondansetron 4mg IV every 8 hours as needed for nausea, vomiting (or an alternative antiemetic)
- dicyclomine 10mg PO every 6 hours as needed for abdominal pain and cramping
- clonidine 0.1mg PO every 6 hours as needed anxiety, agitation, nausea, vomiting
- hydroxyzine 50mg PO every 6 hours as needed anxiety, agitation, nausea, vomiting

When the patient was able to discuss treatment options, she was not interested in abstaining from kratom nor initiating MAOT. The medical toxicology team encouraged the patient to follow up with her primary care and to contact our team if she would like to discuss her kratom use in the future.

Take home points

- Kratom is an herbal product widely used in the United States to self-treat pain, abstain or mitigate dependence from prescription and illicit drugs, and to self-manage opioid withdrawal symptoms.
- Kratom acts as a stimulant at low doses and as an opioid at high doses.
- Acute kratom toxicity may present similar to sympathomimetic or opioid toxidromes.
- Kratom-associated opioid toxicity resulting in respiratory depression should be managed with naloxone.
- Chronic kratom use can result in a use disorder and withdrawal symptoms like those seen in patients with opioid use disorder.

References

1. Garcia-Romeu A, Cox DJ, Smith KE, Dunn KE, Griffiths RR. Kratom (*Mitragyna speciosa*): User demographics, use patterns, and implications for the opioid epidemic. *Drug and Alcohol Dependence*. 2020;208:107849. doi:10.1016/j.drugalcdep.2020.107849
2. FDA and Kratom. U.S. Food and Drug Administration website. <https://www.fda.gov/news-events/public-health-focus/fda-and-kratom>. Accessed December 12, 2022.
3. Singh D, Müller CP, Vicknasingam BK. Kratom (*Mitragyna speciosa*) dependence, withdrawal symptoms and craving in regular users. *Drug and Alcohol Dependence*. 2014;139:132-137. doi:10.1016/j.drugalcdep.2014.03.017
4. Eggleston W, Stoppacher R, Suen K, Marraffa JM, Nelson LS. Kratom use and toxicities in the United States. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*. 2019;39(7):775-777. doi:10.1002/phar.2280
5. Palungwachira P, Yeh M, Whitworth B, Rushton W, Kazzi Z. Clinical Characteristics of Kratom Exposures Reported to the Georgia and Alabama Poison Control Centers from 2016–2020: A Retrospective Review. *Journal of Drug and Alcohol Research*. 2022;11. doi:10.4303/jdar/236162
6. Office of the Commissioner. Laboratory analysis of Kratom products for heavy metals. U.S. Food and Drug Administration. <https://www.fda.gov/news-events/public-health-focus/laboratory-analysis-kratom-products-heavy-metals>. Published April 4, 2019. Accessed December 12, 2022.
7. Gottlieb S, Ostroff S. Statement from FDA commissioner Scott Gottlieb, M.D. and FDA deputy commissioner for foods and veterinary medicine Stephen Ostroff, M.D., on the ongoing risk of salmonella in Kratom products. U.S. Food and Drug Administration. <https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-and-fda-deputy-commissioner-foods-and-veterinary>. Published July 8, 2018. Accessed December 12, 2022.
8. Trakulsrichai S, Sathirakul K, Auparakkitanon S, et al. Pharmacokinetics of mitragynine in man. *Drug Des Devel Ther*. 2015;9:2421-2429. Published 2015 Apr 29. doi:10.2147/DDDT.S79658
9. McNeely J, Adam A. Substance Use Screening and Risk Assessment in Adults [Internet]. Baltimore (MD): Johns Hopkins University; 2020 Oct. Table 3, DSM-5 Diagnostic Criteria for Diagnosing and Classifying Substance Use Disorders. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK565474/table/nycgsubuse.tab9/>.
10. Weiss ST, Douglas HE. Treatment of kratom withdrawal and dependence with buprenorphine/naloxone: A case series and Systematic Literature Review. *Journal of Addiction Medicine*. 2021;15(2):167-172. doi:10.1097/adm.0000000000000721

Choosing Wisely

An initiative of the ABIM Foundation

American Academy of Pediatrics –
Section on Emergency Medicine and the
Canadian Association of Emergency Physicians

American Academy of Pediatrics
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CAEP | ACMU

Five Things Physicians and Patients Should Question

1 Do not obtain radiographs in children with bronchiolitis, croup, asthma, or first-time wheezing.

Respiratory illnesses are among the most common reasons for pediatric emergency department (ED) visits, with wheezing being a frequently encountered clinical finding. For children presenting with first-time wheezing or with typical findings of asthma, bronchiolitis, or croup, radiographs rarely yield important positive findings and expose patients to radiation, increased cost of care, and prolonged ED length of stay. National and international guidelines emphasize the value of the history and physical examination in making an accurate diagnosis and excluding serious underlying pathology. Radiography performed in the absence of significant findings has been shown to be associated with overuse of antibiotics. Radiographs should not be routinely obtained in these situations unless findings such as significant hypoxia, focal abnormalities, prolonged course of illness, or severe distress are present. If wheezing is occurring without a clear atopic etiology or without upper respiratory tract infection symptoms (eg, rhinorrhea, nasal congestion, and/or fever), appropriate diagnostic imaging should be considered on a case-by-case basis.

2 Do not obtain screening laboratory tests in the medical clearance process of pediatric patients who require inpatient psychiatric admission unless clinically indicated.

The incidence of mental health problems in children has increased in the last two decades, with suicide surpassing homicide as the second leading cause of death in teenagers. Most children with acute mental health issues do not have underlying medical etiologies for these symptoms. A large body of evidence, in both adults and children, has shown that routine laboratory testing without clinical indication is unnecessary and adds to health care costs. Any diagnostic testing should be based on a thorough history and physical examination. Universal requirements for routine testing should be abandoned.

3 Do not order laboratory testing or a CT scan of the head for a patient with an unprovoked, generalized seizure or a simple febrile seizure who has returned to baseline mental status.

Children presenting with unprovoked, generalized seizures or simple febrile seizures who return to their baseline mental status rarely have blood test or CT scan findings that change acute management. CT scans are associated with radiation-related risk of cancer, increased cost of care, and added risk if sedation is required to complete the scan. A head CT scan may be indicated in patients with a new focal seizure, new focal neurologic findings, or high-risk medical history (such as neoplasm, stroke, coagulopathy, sickle cell disease, age <6 months).

4 Do not obtain abdominal radiographs for suspected constipation.

Functional constipation and nonspecific, generalized abdominal pain are common presenting complaints for children in emergency departments. Constipation is a clinical diagnosis and does not require testing, yet many of these children receive an abdominal radiograph. However, subjectivity and lack of standardization result in poor sensitivity and specificity of abdominal radiographs to diagnose constipation. Use of abdominal radiographs to diagnose constipation has been associated with increased diagnostic error. Clinical guidelines recommend against obtaining routine abdominal radiographs in patients with clinical diagnosis of functional constipation. The diagnosis of constipation or fecal impaction should be made primarily by history and physical examination, augmented by a digital rectal examination when indicated.

5 Do not obtain comprehensive viral panel testing for patients who have suspected respiratory viral illnesses.

Viral infections occur frequently in children and are a common reason to seek medical care. The diagnosis of a viral illness is made clinically and usually does not require confirmatory testing. Additionally, there is a lack of consistent evidence to demonstrate the impact of comprehensive viral panel (i.e., panels simultaneously testing for 8–20+ viruses) results on clinical outcomes or management, especially in emergency department settings. Hence, most national and international clinical practice guidelines do not recommend their routine use. Additionally, some viral tests are quite expensive, and obtaining nasopharyngeal swab specimens can be uncomfortable for children. Comprehensive viral panel testing can be considered in high-risk patients (eg, immunocompromised) or in situations in which the results will directly influence treatment decisions such as the need for antibiotics, performance of additional tests, or hospitalization. Testing for specific viruses might be indicated if the results of the testing may alter treatment plans (e.g., antivirals for influenza) or public health recommendations (e.g., isolation for SARS-CoV-2). For more specific recommendations related to diagnosis and management of SARS-CoV-2, please see www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/.

How This List Was Created

The American Academy of Pediatrics Section on Emergency Medicine (AAP SOEM) Committee on Quality Transformation (COQT) assembled a task force to oversee the creation of a Pediatric Emergency Medicine Choosing Wisely list. The task force first collected suggested recommendations from a diverse group of ED providers (physicians, nurses, and advanced practice providers) from six academic pediatric EDs to gather an initial list of frequently overused and/or avoidable tests and interventions. Task force members independently scored these items on an anchored rating scale based on each item's frequency of overuse in a typical ED shift, the evidence for lack of efficacy, and the potential harm associated with overuse. The scores were discussed, and consensus was reached for the top 25 ranked items. Next, this list of 25 proposed items was sent to all COQT members in a survey format. The COQT member survey respondents selected which 10 items they believed should be included in the Choosing Wisely list. The task force then ranked the selected items based on the frequency of selection by COQT members. The five top-ranked items that were not duplicative of items on other subspecialty Choosing Wisely lists were submitted and approved by AAP SOEM leadership. The list of five final items with summary evidence was subsequently forwarded for peer review to relevant expert AAP Committee, Council, and Section leadership. The AAP Board of Directors and Executive Committee granted final approval of this list.

Sources

1. Ralston SL, Lieberthal AS, Meissner HC, et al. Clinical practice guideline: the diagnosis, management, and prevention of bronchiolitis. *Pediatrics*. 2014;134(5):e1474-e1502. DOI: <https://doi.org/10.1542/peds.2014.2742>
- Trotter ED, Chan K, Allan D, Chauvin-Kimoff L. Managing an acute asthma exacerbation in children. *Pediatr Child Health*. 2021;26(7):438-439. DOI: [10.1093/pch/pxab058](https://doi.org/10.1093/pch/pxab058)
- Shah SN, Bachur RG, Simel DL, Neuman MI. Does this child have pneumonia? The rational clinical examination systematic review. *JAMA*. 2017;318(5):462-471. DOI: [10.1001/jama.2017.9039](https://doi.org/10.1001/jama.2017.9039)
- Schuh S, Lalani A, Allen U, et al. Evaluation of the utility of radiography in acute bronchiolitis. *J Pediatr*. 2007;150(4):429-433. DOI: [10.1016/j.jpeds.2007.01.005](https://doi.org/10.1016/j.jpeds.2007.01.005)
- National Heart, Lung, and Blood Institute. Expert Panel Report 4: Guidelines for the Diagnosis and Management of Asthma, National Asthma Education and Prevention Program, Third Expert Panel on the Diagnosis and Management of Asthma. Bethesda, MD: National Heart, Lung, and Blood Institute; 2007:391
- Thrasher TW, Rolli M, Redwood KS, et al. 'Medical clearance' of patients with acute mental health needs in the emergency department: a literature review and practice recommendations. *WMJ*. 2019;118(4):156-163
- Donohio JJ, Horeczko T, Kaji A, Santillanes G, Claudius I. Most routine laboratory testing of pediatric psychiatric patients in the emergency department is not medically necessary. *Health Aff (Millwood)*. 2015;34(5):812-818
- Chun TH. Medical clearance: time for this dinosaur to go extinct. *Ann Emerg Med*. 2014;63(6):676-677
- Donohio JJ, Santillanes G, McCamack BD, et al. Clinical utility of screening laboratory tests in pediatric psychiatric patients presenting to the emergency department for medical clearance. *Ann Emerg Med*. 2014;63(6):666-675.e663
- Santillanes G, Donohio JJ, Lam CN, et al. Is medical clearance necessary for pediatric psychiatric patients? *J Emerg Med*. 2014;46(5):800-807
- Santiago LI, Turk MG, Fottin GL, Mojica MA. Children requiring psychiatric consultation in the pediatric emergency department—epidemiology, resource utilization, and complications. *Pediatr Emerg Care*. 2006;22(2):85-89
- Hirtz D, Ashwal S, Berg A, et al. Practice parameter: Evaluating a first nonfebrile seizure in children. Report of the Quality Standards Subcommittee of the American Academy of Neurology, the Child Neurology Society, and the American Epilepsy Society. *Neurology*. 2000; 55(5):616-623. Reaffirmed October 17, 2020
- Rivello JJ Jr, Ashwal S, Hirtz D, et al. American Academy of Neurology Subcommittee, Practice Committee of the Child Neurology Society. Practice parameter: Diagnostic assessment of the child with status epilepticus (an evidence-based review). Report of the Quality Standards Subcommittee of the American Academy of Neurology and the Practice Committee of the Child Neurology Society. *Neurology*. 2006;67(9):1542-1550
- McKenzie KC, Hahn CD, Friedman JN, Canadian Paediatric Society, Acute Care Committee. Emergency management of the paediatric patient with convulsive status epilepticus. *Pediatr Child Health*. 2021;26(7):50-57
- American Academy of Pediatrics, Subcommittee on Febrile Seizures. Neurodiagnostic evaluation of the children with a simple febrile seizure. *Pediatrics*. 2011;127(2):389-394. DOI: <https://doi.org/10.1542/peds.2010.3318>
- Freedman SB, Roden J, Hall M, et al. Delayed diagnoses in children with constipation: multicenter retrospective cohort study. *J Pediatr*. 2017;186:87-94.e6. DOI: <https://doi.org/10.1016/j.jpeds.2017.03.061>
- Pensabene L, Buonanno C, Fishman L, Chikara D, Narko S. Lack of utility of abdominal x-rays in the evaluation of children with constipation. Comparison of different scoring methods. *J Pediatr Gastroenterol Nutr*. 2010;51(2):155-159. DOI: <https://doi.org/10.1097/MPG.0b013e3181c43099>
- Berger MY, Tabbers MM, Korver MJ, Boluyt N, Benninga MA. Value of abdominal radiography, colonic transit time, and rectal ultrasound scanning in the diagnosis of idiopathic constipation in children: a systematic review. *J Pediatr*. 2012;161(1):44-50.e502. DOI: <https://doi.org/10.1016/j.jpeds.2011.12.045>
- Tabbers MM, Di Lorenzo C, Berger MY, et al. Evaluation and treatment of functional constipation in infants and children: Evidence-based recommendations from ESPGHAN and NASPGHAN. *J Pediatr Gastroenterol Nutr*. 2014;58(2):258-274. DOI: <https://doi.org/10.1097/MPG.0000000000000266>
- Kearney R, Edwards T, Bradford M, Klein E. Emergency provider use of plain radiographs in the evaluation of pediatric constipation. *Pediatr Emerg Care*. 2019;35(9):624-629. DOI: [10.1097/PEC.0000000000001549](https://doi.org/10.1097/PEC.0000000000001549)
- Freedman SB, Thull-Freedman J, Manson D, et al. Pediatric abdominal radiograph use, constipation, and significant misdiagnoses. *J Pediatr*. 2014;164(1):83-88.e2
- Gill PJ, Richardson SE, Ostrow O. Testing for respiratory viruses in children: to swab or not to swab. *JAMA Pediatr*. 2017;171(8):798-804
- Noel KC, Fortelle PS, Winters N, et al. The clinical utility of respiratory viral testing in hospitalized children: a meta-analysis. *Hosp Pediatr*. 2019;9(7):483-494
- Parikh K, Hall M, Mittal V, et al. Establishing benchmarks for the hospitalized care of children with asthma, bronchiolitis, and pneumonia. *Pediatrics*. 2014;134(3):555-562
- Innis K, Hasson D, Bodilly L, et al. Do I need proof of the culprit? Decreasing respiratory viral testing in critically ill patients. *Hosp Pediatr*. 2021;11(1):e1-e5

About the ABIM Foundation

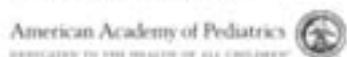
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To learn more about the ABIM Foundation, visit www.abimfoundation.org.



About the American Academy of Pediatrics and the Section on Emergency Medicine

The American Academy of Pediatrics is an organization of 67,000 primary care pediatricians, pediatric medical subspecialists and pediatric surgical specialists dedicated to the health, safety and well-being of infants, children, adolescents and young adults. The AAP Section on Emergency Medicine (SOEM), a group of over 1,900 members, was founded in 1981. The SOEM mission is to sustain, develop, and promote the delivery of optimal emergency care for acutely ill and injured infants, children, and adolescents. The Section envisions: equitable access to emergency care for infants, children, and adolescents; delivery of evidence-guided, safe, and cost-effective emergency care; and development of creative and innovative programs that address the needs of our membership.



About the Canadian Association of Emergency Physicians (CAEP)

As the national voice of emergency medicine (EM), CAEP provides continuing medical education, advocates on behalf of emergency physicians and their patients, supports research and strengthens the EM community. In co-operation with other specialties and committees, CAEP also plays a vital role in the development of national standards and clinical guidelines. CAEP keeps Canadian emergency physicians informed of developments in the clinical practice of EM and addresses political and societal changes that affect the delivery of emergency health care.



Augusta University Updates

This winter has been another busy one for us here in Augusta. The seasonal respiratory virus season is always a busy one, but our team has responded well to the large volume of patients caused by the trio of COVID, influenza, and RSV.

We matched one of our strongest ever military matches ever. It is our pleasure to welcome:

Christoper Alberts

Matthew Brown

Gabriella Bulman

Hunter Crawley

Andrew Dill

Matthew McLaughlin

Joshua Mihalicin

Benjamin Wheeler

Civilian recruitment is ongoing. In addition to applicants from across the country, we are welcoming our first ever applicants from the MCG 3+ program. This initiative seeks to prepare students for residency even faster in order to serve the need for qualified physicians in Georgia. This challenging process allows for students to place into residency a year sooner by compressing their curriculum.

Maya Alexandri placed second in the national ACEP 20 in 6 competition at the recent scientific assembly. This fast-paced lecture competition had competitors from across the country. Her presentation on Pulse Oximetry Racial Bias is not to be missed!

GEMPLAC Award Winners:

Joseph Arellano, DO: GCEP In-Training Professionalism and Service Award

Matt Lyon, MD: GCEP Leadership Award

We continue to be so proud of our stellar residents. They are doing a stellar job in these challenging times.

-Dan McCollum

NE Georgia Updates

Northeast Georgia is enjoying being a new academic center with our first class of 12 residents hitting their stride at the 6-month mark. We continue to develop our scholarship in the last quarter with another publication by Dr. Ziad Faramand on pre-hospital EKGs and national talks about trauma-informed care by our new ultrasound faculty, Dr. Jordan Dow. We continue to hire for our academic team and will be adding more ultrasound and pediatric faculty in the upcoming year and are looking to hire. The biggest news is that we have launched a brand new simulation fellowship under the leadership of Dr. Sidhant Nagrani. This is a one-year fellowship that will focus on developing the fellows to be generalized simulation faculty, but will have special emphasis on using simulation for hospital-wide quality improvement and training processes. We are taking one to two fellows in the upcoming academic year. Interested applicants can find more information on the website.

Josh Mugele



Kennestone Residency Update

Happy Holidays from the Kennestone Residency program!

The last few months have seen significant changes to the Wellstar system. With the closing of Atlanta Medical Center, Kennestone was fortunate to be able to absorb respected and long-standing programs in orthopedic and general surgery. While the addition of new training programs naturally causes some anxiety, the transition has been remarkably smooth. We are very excited about the educational and clinical growth opportunities that these programs bring to Kennestone, and we have already seen an uptick in our trauma volume.

We continue to develop unique educational partnerships with neighboring hospitals. In addition to our ongoing success with ED rotations at Sylvan Grove and North Fulton, we have teamed with an Ob/Gyn group at North Fulton to train the residents in comprehensive delivery and peripartum/postpartum care. This rotation has been a tremendous success and has gotten rave reviews from the residents.

Along with our continued programmatic growth and success, we are expanding our scholarship program. We have had a numerous regional and national presentations in the past few months, including:

- Allison Auchter, MD, EM2: Oral case presentation at ACEP
- Mahtab Parham, DO, EM3: Lecture on ballistics injury at CEMC
- Karen Bowers, MD, EMS Director: Orthopedic emergencies at CEMC

Finally, as we approach the midway point in the academic year I would like to recognize the members of the senior class (and one from a prior year) who have already secured fellowships for next year:

- Mayur Patel, MD, Class of 2020 , Current Admin Fellow: Global Emergency Medicine Fellowship at the University of Florida, Gainesville
- Luke Bishop, MD, EM3: Point-of-Care Ultrasound in Resource Limited Settings (PURLS) Fellowship at the University of Alabama, Birmingham
- James Infanzon, MD, EM3: EMS Fellowship at Orlando Health/Orange County, Orlando, Florida
- Sasha Degtyar, MD, EM3: Administrative Fellowship TBD (she has offers and is deciding)

Five years have flown by and I am extremely proud of our team at Kennestone. Many more good things are yet to come!

Ted Stettner

Thanks to all who attended GEMLAC 2022!

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