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Submissions to the November/December 2024 Newsletter should be received by the Chapter office no later than December 1, 2024.

COUNCIL

Therese Mead, DO, FACEP

As I'm writing this, I'm still getting caught up from a very busy (and hot!) week in Las Vegas where I attended the 2024 ACEP Council at Scientific Assembly. We debated nearly 70 resolutions over two days of Council, and as a special highlight Dr. Diana Nordlund was elected to the ACEP Board of Directors! Congratulations once again! Dr. Nordlund's legal expertise and breadth of experience will be a true asset to the Board. The work of the Council (and our 20 councillors and 11 alternate councillors) began long before the two jam-packed days of ACEP Council at Scientific Assembly. In this month's column, I'd like to share some of the groundwork that goes into ACEP Council for members who may not have experienced Council firsthand.

Earlier this Spring/Summer, MCEP members compiled ideas and vetted resolutions for support or sponsorship through the MCEP Resolution Task Force, co-managed by Drs. Sara Chakel and Antony Hsu. The work of this task force led to three completed resolutions, including sponsorship of a resolution supporting continuous physician staffing in rural EDs, a commendation resolution for the service of Dr. Rami Khoury on the ACEP Board of Directors, and a memorial resolution in memory of Dr. Gregory Walker. Any 2 ACEP members can submit a resolution, and your Michigan chapter is available to provide input/consider co-sponsorship if you have an idea that you would like to explore as a future resolution to guide policy development and activities of ACEP.

Several weeks prior to Council, councillors have the opportunity to provide and review asynchronous testimony for the resolutions online. This testimony period is followed by a meeting of councillors and alternate councillors to discuss all the resolutions prior to ACEP Council. During this half-day meeting, we preliminarily discuss the resolutions as well as a consensus recommendation for each resolution. This meeting additionally provides an opportunity to discuss all the candidates for the ACEP Board of Directors as well as the President-Elect and other elected positions. Finally, we meet again at ACEP Council.

Each 10-12 hour day of Council is packed with business of the Council, meeting of reference committees, debate on the Council floor, and, of course, elections. This year, Dr. Earl Reisdorff was recognized at the Council Luncheon as the recipient of the 2024 James D. Mills Outstanding Contribution to Emergency Medicine Award . Dr. Larisa Traill served as Chair of Reference Committee (Ref Com) A, an appointment that requires considerable time and effort dedicated to Council. Dr. Emily Mills served as a member of Ref Com A and Dr. Jim Mitchiner served on Ref Com B. The skill of our Ref Com members was evident in a Council meeting that ran very efficiently. Additionally, several members served as Tellers, assisting with flow of the Council. The service of each councillor and alternate councillor is sincerely appreciated. Dr. Emily Mills deserves special recognition as our chapter Councillor Liaison. In this role, Dr. Mills directs the entire process of getting us organized and ready. And, of course, a special thank you as always to Christy Snitgen and the administrative team, who managed the overall Council experience for our Councillors.

Participation in ACEP Council is an energizing and fulfilling service. At each Council, issues that affect our daily practice are discussed, this year including ED boarding, scope of practice, rural EM workforce, and fair reimbursement. Although few (or even none) of these issues have immediate simple solutions, the effort of each Council takes us steps forward in the right direction toward meaningful, positive change. Thank you again to everyone for your service this year & let us know if you'd like to get involved in the future! §

P.S. It's not too late to apply for next year's Leadership & Development Program, a great way to get involved.

MCEP had one of the largest delegations at the ACEP Council meeting in Las Vegas in late September. This year, our chapter submitted a commendation resolution honoring Rami R. Khoury, MD, FACEP for his service on the ACEP Board of Directors as well as a resolution in memory of Gregory L. Walker, MD, FACEP. We also co-sponsored Resolution 27: Continuous Physician Staffing for Rural Emergency Departments, which was adopted as amended by the Council.

AI REFERRED ME TO THE ER

Just like many of us, I work in a busy emergency department, that seems to always be the most active during the afternoon. It's not uncommon to come into a shift with a variety of patients to be seen, and often part of the mix is referrals from outpatient clinics. I'm sure these types of visits are common for most every department, and they seem to almost always fit into a certain pattern I have noticed. Often, they seem to be patients who are sent in for imaging studies that can't (or simply don't want to be) done in an outpatient timeline, to positive imaging results that need consultation, to my personal favorite the asymptomatic hypertensive that is almost always extremely happy to be seen and discharged. Less commonly, is the patient who brings themselves in for a second opinion, sometimes because they had been seen at another facility and disagree with their care, or are having persistent symptoms and don't have a specific diagnosis, and are "looking for an answer," which is always "your mileage may vary" type of experience.

On one of my last shifts, I had a completely new encounter that I had not ever anticipated, a patients Artificial Intelligence (AI) search had sent him to the emergency department. Somehow, and to be honest I'm still not sure exactly how this works, he had uploaded his images into AI and it had provided an interpretation and recommendation for referrals to the ER and consultation with a subspecialist. To say the least I was quite surprised and felt like I needed to start giving AI much more of a consideration and start engaging more with the technology.

The timing for this event couldn't have been better, it was right before ACEP Scientific Assembly this year. AI talks were peppered into the schedule, and varied in their depth about what AI is and the impact that it is likely to have on the future practice. In addition to this, I learned about the AI task force that ACEP is utilizing to investigate and respond to the emerging technology and challenges that AI is or is likely to present. When I was listening to the presentations about the work being done and the challenges that are likely to be found with AI, I found it overwhelming to say the least. For this reason, I asked a longstanding MCEP member and current participant on the task force, Dr Brad Walters, to give his thoughts and insights on the challenges ahead for AI. You will see this in the following and would like to thank him for his contribution.

Andrew Taylor, DO, FACEP

Artificial Intelligence is likely to emerge one way or another in a significant way in clinical practice. As Dr. Walter's article mentions, whether this is from scheduling, billing, charting, image interpretation, or possibly some combination of all those areas, AI will likely be an important part of everyday clinical practice. I think it is important to keep an eye on technologies as they advance and help shape them into a model something that works for us instead of against. The general population is likely to continue to increase using these technologies, and lead to an increase in "AI sent me to the ER." How we respond, and how we shape the future, may not be a small task but will likely impact anyone practicing current clinical emergency medicine. In case anyone was wondering, the patient who used AI as a referral to the emergency department was given appropriate referral to an outpatient specialist for a discussion about his imaging results. §

Michigan Emergency Medicine News & Views is the official publication of the Michigan College of Emergency Physicians. Deadline for publication of all letters/articles is the 5th of the month prior. All correspondence should be addressed to MCEP News & Views, 6647 West St. Joseph Hwy., Lansing, MI 48917. Telephone (517) 327-5700, FAX (517) 327-7530, www.mcep.org. Opinions expressed within this newsletter do not necessarily reflect the College's point of view. While News & Views believes that the ads it accepts originate from reputable sources, it takes no responsibility for the consequences resulting from, or the responses generated by, any commercial or classified advertisement.

LEGISLATIVE COLUMN

2024 ELECTION PREVIEW

The television and social media political advertising will continue right up to Election Day on November 5, 2024, so don't count on any relief from that until then! Several major changes in election law in Michigan have influenced how campaigns operate this year though. Michigan is now a no-reason, permanent absentee ballot state, meaning a large portion of registered voters already have a ballot in hand and turned in. This is coupled with our first ever, early voting period beginning Saturday, October 26th at municipal based locations. This should reduce election day voting lines but many voters are still hesitant on both new options.

There are no statewide ballot questions this fall so it all comes down to the Presidential, open US Senate seat, congressional races and control of the Michigan House of Representatives. Congressional seats in mid-Michigan and the Bay/Saginaw/Flint areas are among the most expensive in the entire nation. Both are open seats and will determine control of the US House.

On the Michigan House front, the current power split is 56 Democrats and 54 Republicans. Both sides have multiple incumbents under the microscope. On the Democratic side, members in Macomb County, Downriver Wayne County, a Grand Traverse based seat and the Marquette based seat are among the biggest challenges. Several others are in play but that first batch of races is where the GOP is trying to gain seats.

Speaking of the GOP, they have a few members in Oakland County that are facing tough reelect campaigns. With VP Harris up double digits in the county, two seats in northern Oakland County are viewed as possible pickups for the Dems. There's also a current GOP seat in Jackson that is being challenged by the sitting Democratic Mayor of Jackson.

At the end of the day, we find it hard to see either party having more than 56 or 57 seats in January of 2025. Given the hypersensitivity of a number of these seats on turnout and the strengths of the Presidential candidates in certain regions, there's a very real chance of VP Harris winning the state but House Democrats losing control by a seat or two. What we do know is that it'll be well into Wednesday, November 6th before we know the final situation. §

Bret Marr, Lobbyist
Muchmore, Harrington, Smalley & Associates

HOUSE AND SENATE HEALTH POLICY COMMITTEES FALL UPDATES

Session in September and October have been minimal due to the upcoming election. The House has not met beyond one session day to handle budget implementation bills. The Senate Health Policy committee has been having hearings on issues that are non-controversial and ready to start the hearings process. The lame duck session will be far more robust, however, we don't see many issues focusing on physicians directly. The nurse staff ratio bills may come up but there is widespread opposition to the bills as introduced. We also don't expect any scope bills to pass through both chambers but will be quick to alert MCEP members if pressure on lawmakers is needed. §

MCEP CALENDAR OF EVENTS 2024-2025

November 21, 2024
Expert Witness Course
Virtual Zoom Meeting

December 4, 2024
Board of Directors
Chapter Office
Lansing, Michigan

December 10, 2024
$traight Talk Reimb. Course
Virtual Zoom Meeting

January 23-27, 2025
MCEP Winter Symposium
Mountain Grand Lodge
Boyne Mountain, Michigan

January 25, 2025
Board of Directors
Mountain Grand Lodge
Boyne Mountain, Michigan

February 12-13, 2025
ITE Review Course
Virtual Zoom Meeting

March 5, 2025
Board of Directors
Chapter Office
Lansing, Michigan

March 20, 2025
Critical Care Course
Virtual Zoom Meeting

April 27-28, 2025
ACEP Leadership & Advocacy Conference
Washington, DC

REIMBURSEMENT COLUMN

2023 MEDICARE ACUITY

The latest Medicare acuity has been recently released. This information includes allowed services provided by Medicare part B for the Emergency Medicine from January 1, 2023 to December 31, 2023. This information is provided yearly by CMS. Practices can use this data to compare themselves to both State and National averages for physician and APP's. Medicare may use this data to identify potential outliers and thus potential audits. Remember this data is not representative of all visits to practices or place of service, but a selective subset of traditional EM practices. This data can be helpful to review with your practices and Revenue Cycle Management team to gauge documentation compliance. §

Don Powell, DO, FACEP

EMERGENCY MEDICINE PHYSICIANS, SPECIALTY 93

	99281	99282	99283	99284	99285	99291	Total
National	0.0%	0.7%	5.5%	26.6%	55.1%	12.0%	12,946,718
Michigan	0.0%	0.5%	4.9%	27.6%	55.3%	11.7%	398,094

PHYSICIAN ASSISTANTS, SPECIALTY 97

	99281	99282	99283	99284	99285	99291	Total
National	0.1%	1.9%	11.0%	42.5%	40.6%	3.9%	1,576,659
Michigan	0.0%	1.1%	9.9%	43.9%	40.7%	4.4%	40,957

NURSE PRACTITIONERS, SPECIALTY 50

	99281	99282	99283	99284	99295	99291	Total
National	0.1%	2.3%	12.5%	43.8%	38.4%	2.9%	867,882
Michigan	0.1%	2.1%	13.3%	46.6%	34.9%	3.2%	20,771

Don H Powell, DO, FACEP
President- Medical Management Specialists
Director RCM & Advocacy- Emergency Care Specialists

TEN-4-FACESp: YOU JUST NEED TO THINK ABOUT IT.

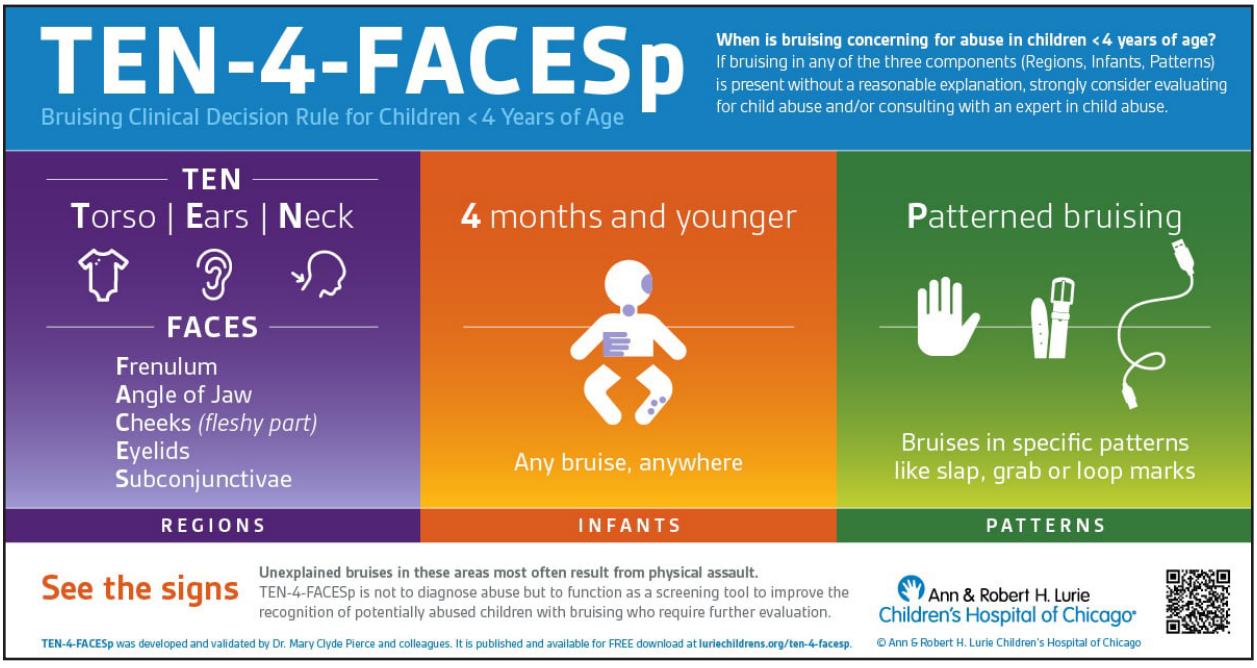
A mentor of mine during my early training years used to tell me that if I didn't think about something I'd never diagnosis it. Well, duh. That always seemed so obvious to me. And as a new, younger-than-I-am-now doctor who loved to come up with the longest differential list in the history of all lists, I figured I had that covered. So, when a child presented with a subconjunctival hemorrhage, I confidently included everything from neoplasm to prion disease to bleeding disorder in my list. But I remember the humbling feeling when my mentor suggested one simple thought – non-accidental trauma. I remember the feeling when I realized I could have missed that by not considering it, and the even worse feeling when his suspicion proved to be true. My lesson was learned. I now consider the potential for abuse in every child I see. Because if you don't think about abuse, you will never diagnosis it.

Prior to 2020, data from the Census Bureau, the National Child Abuse and Neglect Data System and the Adoption and Foster Care Analysis and Reporting System showed that between 30,000-40,000 kids in Michigan annually were victims of abuse and/or neglect. But in 2020, that number dropped to 27,000, and has continued to decline, with 2023 showing 24,000 cases[1] This should be celebrated, right? Nope. The Annie E. Casey Foundation, which exists to track data regarding kids' well-being in the US, believes that this is "a result of underreporting as opposed to a true reduction in child abuse and neglect. With kids engaged in remote schooling and families skipping medical check-ups, children may have lost valuable opportunities to interact with mandated reporters, meaning some instances of abuse and neglect may have never been reported or investigated."[2] Its very likely abuse cases are still happening with the same frequency, they are just not being detected and reported. But as Emergency Physicians, if we think about it, we can be the first line of defense in identifying and preventing child abuse. If we think about it, we can detect early signs of abuse, intervene, and potentially save lives.

Once we think about it, our role in addition to taking care of any medical concerns, is to suspect and report to child protective services. Our role is not to prove that the abuse is happening. Sometimes it's obvious we need to report like when we see questionable injures that do not match the story given, failure to thrive, exposure to drugs, malnourishment, or repeated visits for "accidental" injuries. But we can also detect the likelihood of abuse happening based on the location of even minor injuries. **TEN-4-FACESp**, a decision-making tool developed and validated by Dr. Mary Clyde Pierce at the Ann and Robert H. Lurie Children's Hospital in Chicago is 96% sensitive and 87% specific for distinguishing abusive from non-abusive trauma in kids under age 4. With this tool, any child with 3 positive components is at increased risk of abuse and warrants further evaluation.[3]

- **T**orso
- **E**ars
- **N**eck
- **4** – any bruise on infant 4 months or younger
- **F**renulum
- **A**uricular area (ear)
- **C**heeks
- **E**yes
- **S**clera (white part of the eye)
- **P**atterned bruising

Bruising is the most common injury from physical child abuse and is most likely to be the preceding injury to abusive head



trauma.[3] Attention to bruising is an actionable step that we can take to help identify children at risk of physical abuse and potentially improve the outcomes of these young children.[4] For more information, see this video distributed by MDHHS: https://vimeo.com/916757607/080748688b

Once you suspect abuse or neglect it should be reported. I know it's extra steps and more work. But as a mandated reporter, you are required by law to file a report as a 3200 form. Not doing it can result in civil and criminal penalties.[5] Moreover, it is the right thing to do.

Reporting in Michigan can easily be done by calling 855-444-3911 and filing a 3200 form. Additionally, you can go to https://newmibridges.michigan.gov and click on the mandated reporter link at the top. From there you can essentially file the equivalent of a 3200 form online, and it will give you an ID number at the end. I find this to be much simpler than calling. I place the ID number in the patient's chart to enable easy follow up. If you need immediate assistance or the child is going to need immediate intervention and placement, you should call the main number after you file the report online and ask to escalate the case.

Child abuse and neglect is one of the most difficult topics we deal with in the emergency department. But each time you think about it and identify a child at risk, you set them up to get the help they need to grow and live their lives. There is nothing better than that in our careers, we just must think about it. §

1. https://cwoutcomes.acf.hhs.gov
2. https://datacenter.aecf.org
3. Pierce MC, Kaczor K, Lorenz DJ, et al. Validation of a Clinical Decision Rule to Predict Abuse in Young Children Based on Bruising Characteristics. *JAMA Netw Open*. 2021;4(4):e215832. doi:10.1001/jamanetworkopen.2021.5832
4. https://research.luriechildrens.org/en/community-population-health-and-outcomes/smith-child-health-outcomes-research-and-evaluation-center/tricam/ten-4-facesp/
5. https://www.michigan.gov/mdhhs/adult-child-serv/abuse-neglect/childrens/mandated-reporters/mandated-reporters-list

Michigan Emergency Doctors' Political Action Committee

6647 West St. Joseph Highway Lansing, Michigan 48917 (517) 327-5700

Dear Doctor:

As members of MCEP, ACEP, and the health care community, we dedicate ourselves to advancing quality emergency care. Increasingly, key decisions affecting our ability to fulfill this mission are made by elected officials—few of whom are medically trained and even fewer of whom are emergency physicians—in Lansing and in Washington, D.C.

Emergency physicians face myriad challenges in emergency departments, not the least of which is violence in the workplace. A long-existing barrier to the delivery of quality care, ED violence has steadily increased at a rate greater than four times the rate for workers in the private sector overall. MCEP, with the support of MEDPAC, backed a group of bills in the Michigan legislature to address these concerns, culminating in the passage and enactment of the bipartisan House Bills 4520 and 4521 in 2023. With your support, we will keep the momentum going and build on these wins in the upcoming year.

In addition, we continue to work at the state level to support the interests of Michigan emergency physicians, including limiting scope creep, addressing reimbursement challenges resulting from the implementation of Michigan's Surprise Billing Law, and improving access to psychiatric care. Your support helps us to highlight these and other issues to legislators in Lansing.

I strongly encourage you to contact your legislators in Lansing and in Congress to explain the fundamental role that emergency physicians play in safeguarding and advancing the health of our communities. Your support of MEDPAC allows our message to reach elected officials and helps to strengthen our voice on issues that impact our care, our patients, and our profession.

Please join me in supporting the Michigan Emergency Doctor Political Action Committee! Your donation can be a one-time only donation or broken into quarterly or monthly payments. A link to MEDPAC can be found here: **https://themedpac.org/**. If you would like to donate quarterly or monthly, please contact our office at 517-327-5700 or email madeyv@mcep.org.

Sincerely,

Sara Chakel MD

Sara Chakel, MD, FACEP
Chair, Michigan Emergency Doctors' PAC Board of Trustees

MICHIGAN COLLEGE OF EMERGENCY PHYSICIANS

2025 MCEP AWARD NOMINATIONS

OPEN NOVEMBER 1 - FEBRUARY 15

John A. Rupke, MD Lifetime Achievement Award
Ronald L. Krome, Md Meritorious Services Award
Legacy Award
Emergency Physician of the Year Award
Significant Contribution Award

Find More Info Here

CHEST PAIN WITH AN ABNORMAL TROPONIN IN A YOUNG POSTPARTUM FEMALE

Carissa Herkelman, DO and Todd Hartgerink, DO

BRIEF INTRODUCTION

Spontaneous coronary artery dissection (SCAD) is an under-reported cause of Acute Coronary Syndrome (ACS) that has a major predilection for young women. SCAD only accounts for 1.7-4% of ACS events, although true incidence and prevalence is unclear.[1,2] SCAD occurs when there is a spontaneous separation of the coronary artery by an intramural hemorrhage, with or without an inciting intimal tear, this creates a false lumen which spreads, causing compression of the true lumen causing myocardial ischemia. While the etiology itself is still being investigated, a strong tie has been made to pregnancy and the postpartum period.[1] It has been considered that female sex hormones may structurally change the cardiac vessel walls which may predispose these young women to vessel rupture or dissection. One study in particular noted 40% of their SCAD events happened to occur in young postpartum females.[3] In this report, we discuss a case of a 34 year old postpartum female without any classic cardiac risk factors who presents to a community hospital with acute chest pain. Our case demonstrates the value of clinical gestalt and a thorough emergency department laboratory workup in conjunction with cardiology consultation to rule out ACS. In a population at risk, caution should be taken when laboratory values are within normal limits but still higher than anticipated in a young female without other cardiac risk factors.

CASE PRESENTATION

A 34-year-old female with a past medical history of anxiety and gastroesophageal reflux disease at 9 weeks postpartum from normal spontaneous vaginal delivery presented to the emergency department with sudden onset sharp anterior chest pain that radiated between her shoulder blades. The patient reported that this began after she was walking at work. She described feeling lightheaded and mildly short of breath. She denied any other symptoms at that time. She denied any history of diabetes mellitus, hypertension, dyslipidemia, smoking or early family cardiac history. Her physical examination was largely unremarkable. BP 151/126, HR 69. EKG revealed sinus rhythm with rate of 65 without any axis deviation, ST segment or t wave changes. She received a GI cocktail without any relief of her symptoms, making an etiology of GERD less likely. A laboratory work-up revealed a negative d-dimer. Initial high sensitivity troponin was elevated but still within normal limits at 13.2 (reference range normal <2.50-18.0), a two hour repeat high sensitivity troponin was further elevated at 111.6. With a significant delta troponin, a second EKG was unchanged. She received aspirin per acute coronary syndrome protocol. CT angiography of her chest was obtained and was negative for any pulmonary embolism or aortic dissection. The cardiology service was then consulted, a heparin infusion was initiated, and she was admitted to their service to undergo cardiac catheterization.

Left cardiac catheterization revealed findings concerning for spontaneous coronary artery dissection. She was found to have a proximal dissection and very distal apical left anterior descending coronary artery type F occlusion dissection with restoration of flow after injection of contrast. The remainder of her coronary arteries including her left anterior descending artery were angiographically normal. Her ejection fraction was 50% with inferoapical hypokinesis. This investigation confirmed a diagnosis of SCAD distal LAD type II. After the procedure she was initiated on Toprol-XL, Cozaar, atorvastatin, baby aspirin, and Plavix. Her troponin was trended post-procedurally to resolution. Her lipid panel revealed triglycerides of 222 (reference range normal <150 mg/dl) and was otherwise normal. She was monitored overnight and then discharged home.

The patient followed with cardiology in the outpatient setting at one week, one month, six months and one year. She continued to slowly improve as she attended cardiac rehabilitation sessions. She continued her beta-blocker and antiplatelet therapy for one year post myocardial infarction. She had follow up imaging including MRA that was negative for fibromuscular dysplasia to be a cause of her cardiac event. She had repeat echocardiograms which revealed resolution of her low left ventricular ejection fraction and hypokinesis.

DISCUSSION

While SCAD is rare, it is important for a clinician to include this in their differential diagnosis for acute chest pain in a young female patient, especially one in the acute postpartum period with or without traditional cardiac risk factors. Included on this patient's differential diagnoses were GERD or musculoskeletal causes, and with this one would have expected a high sensitivity troponin of <2.50. Although her high sensitivity troponin was still within normal limits, it was higher than expected. This raised this clinician's concern and a two-hour troponin was obtained and was further elevated. This led to the patient receiving proper cardiac care and intervention. This emphasizes the importance of a good clinical gestalt and further laboratory workup in the emergency department setting to evaluate for ongoing cardiac injury with repeated troponin levels. §

REFERENCES

1. Lebrun, Bond. Spontaneous coronary artery dissection (SCAD): The underdiagnosed cardiac condition that plagues women. Trends in Cardiovascular Medicine 2018;28:340-345.
2. Claudon, Claudon, Edwards. Primary dissecting aneurysm of coronary artery. A cause of acute myocardial ischemia. Circulation 1972;45:259-266.
3. Rashid, Wong, Wijesekera, Gutman,m Shanmugam, Gulati, et al. Incidence and characterisation of spontaneous coronary artery dissection as a cause of acute coronary syndrome-a single-centre Australian experience. Int J Cardiol 2016;202:336-338.

December 10, 2024

$TRAIGHT TALK XXXIII

Virtual Zoom Meeting

MICHIGAN COLLEGE OF EMERGENCY PHYSICIANS

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This course presents valuable information and updates for emergency physicians, billing and coding professionals, and group managers.

EMERGENCY MEDICINE OF TOMORROW: BUILDING A NEW AND IMPROVED EMIG AT MSU-CHM EAST LANSING

Authors: *Nicholas Paselk, Payton Wolbert*

As they embark on their journey through medical school, most students are envisioning the diverse career paths available to them in the field of medicine. It is crucial for students to be surrounded by like-minded peers who share their professional interests and passions. For the Emergency Medicine bound students in the class of 2027 at the Michigan State University College of Human Medicine (MSU-CHM) at the East Lansing Campus, there was a lack of opportunities to network and expand on knowledge in the realm of Emergency Medicine.

Before the pandemic, the Emergency Medicine Interest Group (EMIG) was an active organization that hosted numerous hands-on events. However, the shift to virtual learning during COVID-19 severely impacted its activities, leading to its near dissolution.

Recognizing the need for revitalization, student leaders Sebastian Loonen, Alexander Schreck, and Jordan Simon (all M2s) from the Class of 2027 seized this opportunity to re-establish the EMIG and create pathways for their peers to engage with the field of emergency medicine. The goal of the EMIG is to create a dynamic and influential presence within the school and inspire students for a well-prepared career in emergency medicine. These students have established a group which they hope to pass on to future classes, and to have Emergency Medicine be a top career choice for the students from the program.

RECENT EVENTS

The EMIG has successfully hosted several events designed to foster engagement and connection.

- **CHM x COM Social with the Lansing Lugnuts:** This event allowed students to network with their Osteopathic counterparts at MSUCOM and enjoy a fun evening of baseball.
- **U of M Sparrow Hospital Mass Casualty Volunteering:** Members gained experience volunteering as casualties for the mass casualty training of staff. This allowed students to get a first-hand look at what this kind of experience would entail.
- **EMIG Movie Night:** The group viewed 24/7/365, a documentary from EMRA that highlights the history of emergency medicine and how Lansing, MI is a significant location in the field.

UPCOMING INITIATIVES

Looking ahead, the EMIG at MSU-CHM has some exciting events to get their members more involvement and education including:

- **Ultrasound Clinic:** Members will participate in hands-on training for the FAST exam.
- **Narcan Handout Event:** The group will raise awareness and distribute Narcan, a lifesaving intervention, to the community.
- **Blood Drive Collaboration:** The EMIG will be involved with blood drive to help promote the opportunity to donate blood for those in need.

Without a doubt, the initiatives of the MSU-CHM EMIG are providing many opportunities for their members. It is the hope that these efforts will continue to grow and harvest a passion for the field of emergency medicine. These members are laying the foundation for an impactful organization that will benefit both the students of MSU-CHM and the communities in which they will work. Stay tuned for more updates as they progress on this journey! §

Student Leaders Jordan Simon (M2) and Alexander Schreck (M2) setting up refreshments for EMIG Movie Night

From Left to right Jordan Simon (M2), Sebastian Loonen (M2), Ryan Lints (M2), and Jon Novocel (M2) all participating in the University of Michigan Sparrow Mass Casualty Incident Simulation

The set up of the decontamination tents at the University of Michigan Sparrow Hospital Mass Casualty Incident Simulation Event with a fellow MSUCOM student

The MSU CHM EMIG Leadership Team from Left to Right: Alexander Schreck (M2), Jordan Simon (M2), and Sebastian Loonen(M2) at the Lansing Lugnuts social event.

NEW PAYMENT METHOD BY ACH TO HELP MINIMIZE CREDIT CARD FEES

We are excited to announce that ACEP now offers the option to pay your membership dues through direct *Automated Clearing House (ACH) transfers*, also known as electronic check. Setting up and using ACH transfers saves our chapter **the 3+% credit card service fee that we will soon be shouldering, allowing ACEP *and* MCEP** to put more dollars directly towards the advocacy efforts and other member benefits that you value.

This new payment option is available on the membership application for new and renewing members, while those who are using installments and auto-renew can easily update their payment information any time by accessing the Payment Methods section of My Account on ACEP's website.

Thank you for considering this option.

THE LANDSCAPE OF AI IN THE EMERGENCY DEPARTMENT

Bradford L. Walters, MD, FACEP
William Beaumont University Hospital, Department of Emergency Medicine, Royal Oak, Michigan

Artificial intelligence (AI) is **THE** hot topic not just in medicine but, with its potential to change the face of human/computer interaction, it seems one cannot get away from seeing something about AI in the news and/or media. There is an incessant barrage of AI related advertisements and was very much in evidence at the recent ACEP Scientific Assembly this September. However, any discussion of AI should start with defining what it is. One starting point might be the following:

According to the European Commission, AI is defined as "the ability of a machine to display intelligent behavior by analyzing its environment and taking actions—with some degree of autonomy—to achieve specific goals"

Harvey Castro, MD, an emergency physician, has a bit more practical definition:

Artificial intelligence (AI) is the simulation of human intelligence in machines programmed to think, learn, and solve problems like humans.

While this is a starting point, there are a few more terms that one will see referred to AI programs. Generative Pre-trained Transformers (GPT's) are created to use natural language that can understand context and make appropriate responses. They can pull from a wide range of on-line and published resources for information. They can also perform creative tasks such as drawing a picture or creating a paper. The other term that can describe an AI program is a Large Language model (LLM). An LLM refers to an AI system designed to mimic language based on patterns learned and contextual data. These models typically are trained on billions of words and sentences and can predict the most likely next word in a sentence based on context. In fact, the word processor I am currently using will suggest the next word to type and is an example of an LLM. You might also be familiar (or even use) the rather ubiquitous example of an AI is Open AI's ChatGPT and its new more powerful releases of GPT-4 and GPT-4o.

The impact of AI is not yet known. Being rather old I can remember the early days of cellphones. I am not aware of anyone who predicted how prevalent they would become and how they have intrinsically changed communication in today's world. In some ways AI is similar, and nobody really knows the full extent of how things will change. In one study the prediction was that 80% of the US workforce would have 10% of their tasks impacted and another 19% of the population would have over 50% of their tasks affected. But our interest is in how AI programs might impact our professional lives as emergency physicians.

One strength of AI is in performing repetitive tasks that are time demands on a physicians' practices. This can include scheduling, pre-authorization, contacting patients to make appointments, and highlighting critical results as a few examples. A recent study out of the Mayo Clinic looked at the accuracy of an AI for emergency department billing. They found it to be highly accurate, and this may be one place AI makes a significant impact.

A much more complex task is in charting. Currently there are AI programs that can transform the interaction between a physician and patient creating a HPI in real time. At the ACEP SA there were AI programs that demonstrated reconfiguring an unstructured conversation into a concise HPI. This brings up a potential concern that AI programs would have to be HIPPA compliant and likely even certified as such. There are AI programs that automatically capture the data generated by its users to further train the AI. These include such popular programs as ChatGPT, Google Assistant, Amazon Alexa, Apple's Siri, and Meta's Facebook AI. Should a physician use one of those AI's in a clinical setting, information derived automatically becomes available to that program. If that AI program does not have HIPPA compliant firewalls and is approved by the healthcare system that could be extremely problematic for the physician.

Another area of AI impact in healthcare, that is already available, is

imaging study interpretation. Of interest to emergency physicians are AI's that read chest radiographs for the presence of a pneumothorax and alerts that physician before the study is seen by a radiologist. This type of AI is trained on a huge number of radiographs. One issue of concern is how reliable that AI is and how much the emergency physician can trust its reading of the chest X-ray. As that database rapidly grows another concern is bias. There is a famous example of such bias with CXR interpretation for pneumonia where the AI was less accurate with a study in a less represented patient population. As an AI database grows this bias becomes magnified, since an AI is only as good as the data it is trained on. As AI's grow larger, the ability to detect bias becomes ever more difficult. This brings up the critical issue of how much can one trust the information from an AI. We have gotten used to trusting computer information almost to the point of implicitly relying on such information. Google is such an example where most people trust the information displayed as reliable. But, carrying this concept to healthcare information where a patient's life could be impacted is a greater leap of faith. This becomes even more problematic when the physician may not know how good the AI being used really is.

Data retrieval in real time is where AI programs can be particularly effective. It is the rare shift that I do not query some medical database with a clinical question. It is with some embarrassment that I admit that sometimes I ask, "Dr. Google," but I do have access to databases such as UpToDate that I trust a lot more. Obtaining concise, clinically relevant information with little effort has been one place where computers have shown great value. AI's are likely to make a significant impact is this area and can be incorporated seamlessly into the workflow of the ED. However, AI's can go even further and write papers for medical publications. This is not just a problem in medicine but is seen across the educational and professional landscape. That issue is of great concern to medical educators and the impact of AI's on medical education is as yet undefined.

One can go on contemplating how AI is going to impact medicine. In medical research, in identifying new medications, genetic tailoring of therapies, alerting physicians to patients who fit certain disease patterns (sepsis immediately comes to mind) are all going to impacted by AI. Of note, the 2024 Nobel Prize in Chemistry involved AI assisted protein structure analysis that holds huge promise in medicine and pharmaceuticals. I have not addressed some of the concerning social aspects to AI that can generate accurate looking false news and is already being used in scams.

However, AI's are coming and how they are going to be integrated into your practice is a key issue to consider. When electronic medical records came into use, some might recall how little input emergency physicians had in the choice or structure of that EMR before your hospital instituted its use. The EMR is primarily designed to be a billing instrument (some might say that was the only consideration). The EMR in early stages forced you to fill out the ROS and PE to meet certain billing levels that had little to do with what information was relevant.

I fear, as a hospital-based physician, a similar process will occur with AI programs. Essentially, I will be handed an AI that meets various HIPPA and other issues important to my hospital system but, may not be relevant to my practice in the ED. If history repeats itself there will be little attention given to how that AI fits into my workflow. Let me give what might be an example. AI's are quite good at identifying septic patients (well beyond the discredited SIRS criteria), particularly if given training on large numbers of septic and non-septic patients. But how is that information going to be forwarded to the emergency physician who is often involved in taking care of a critically ill patient or doing a procedure? It could be an alert on ones cellphone that is often distracting, or one might miss or forget to look at the message if the physician is doing a procedure or caring for a critical patient. Should the AI go about automatically ordering the necessary labs and antibiotics to achieve the necessary bundle for sepsis that can be more a billing issue than a medical one? Will the IT department come down to the ED and follow emergency physicians around and tailor an AI program to fit their environment? Or will ED physicians have to alter their workflow to accommodate the program selected by the hospital? As much as any of the questions about AI that issue, in my humble opinion, is as important as any other. §

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EMRAM PRESIDENT COLUMN

A RESIDENT'S GUIDE FOR PREPARING FOR THE IN-TRAINING EXAM

Brittany Garza, DO

It's never too early to start studying for the in-training exam (ITE). February will be here before we know it! For new interns who have not taken an ITE before, the ITE is a yearly online exam taken by emergency medicine residents to demonstrate competency in the specialty. The exam is 225 questions, and you will have 4.5 hours to complete it. There is a one-week period for testing to be completed and each individual residency program will select a day to sit for the exam. This year, the 2025 ITE is scheduled for February 25th- March 1st. Here is my guide to earning a high score on the 2025 in-training exam.

1. **ROSH REVIEW:** I highly recommend completing all questions in the Rosh Review question bank. There is a correlation between the number of practice questions completed and your score on the ITE. After completing the question bank, repeat the questions that you flagged or got incorrect. Further, make sure to thoroughly read the explanations under the questions, even if you got the question correct. This will teach you just as much, if not more, than just answering the question alone.
2. **PEER PREP:** If you are looking for more practice questions, PEER PREP is an excellent resource. Be sure to look at the question explanations and be sure to flag questions you want to review again, just like ROSH Review. I would recommend finishing one question bank before starting another one.
3. **CAROL RIVERS BOOK AND FLASHCARDS:** I am a big fan of the Carol Rivers flashcards because they are portable, and you can study on the go. If you learn best from reading content, this would be an excellent resource for you.
4. **ITE REVIEW COURSE:** Every year, MCEP and EMRAM host a virtual ITE review course to help residents prepare for the ITE. Many attendings volunteer their time to teach a high yield subject and provide digital copies of their PowerPoint presentations for review. This year, the ITE review course is scheduled for February 12th-13th. If you are unable to attend, the course will be recorded and can be accessed later at your convenience.

If you use these study tools, you will surely earn a high score on your ITE! Best of luck and happy studying! §

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