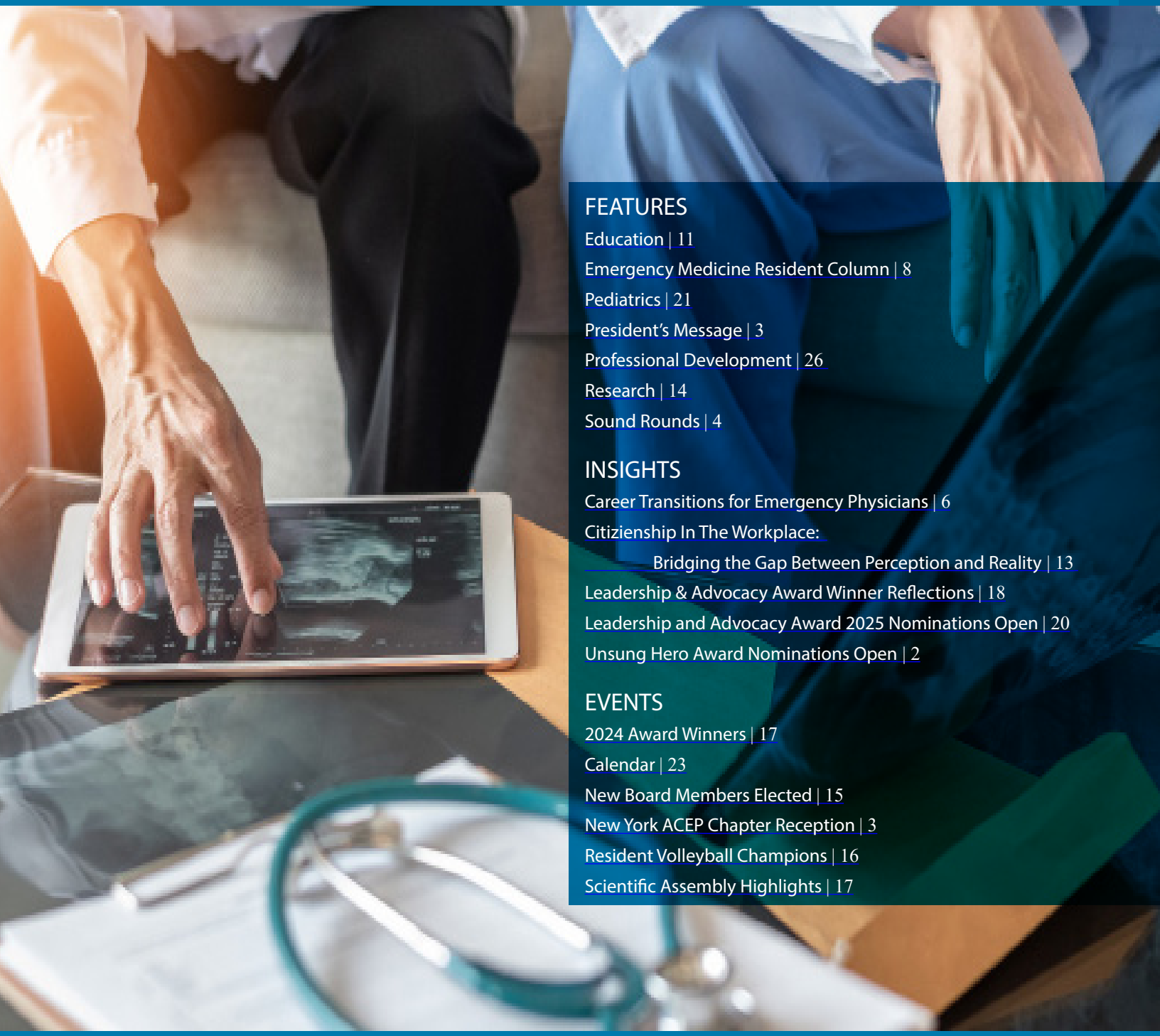
Empire State EPIC

New York American College of Emergency Physicians



UNSUNG HEROES

in New York State Emergency Departments

Designate Your Honoree
for New York ACEP's 2024 Unsung Heroes

New York
AMERICAN COLLEGE OF
EMERGENCY PHYSICIANS

By designating a physician on your staff, you gain recognition for their efforts and your organization. New York ACEP will promote honorees and their Departments in local, regional and statewide public relations efforts, as well as through the New York ACEP website.

About the Award: A New York State Emergency Medicine Unsung Hero goes beyond simply being the embodiment of what it means to be an emergency physician. They are a stalwart of the emergency department, who is deeply committed to the mission of the emergency department, their colleagues, co-workers and patients. The unsung hero is always willing to help a colleague — within the clinical environment or not. They are the trusted individual who is known to bring comfort and a smile to the faces of all those around.

Submission Deadline - October 11, 2024

Promote Your Department

Department Director submission of the designated honoree required.

PRESIDENT'S MESSAGE

Jeffrey S. Rabrich, DO MBA FACEP FAEMS
Senior Vice President
Envision Physician Services

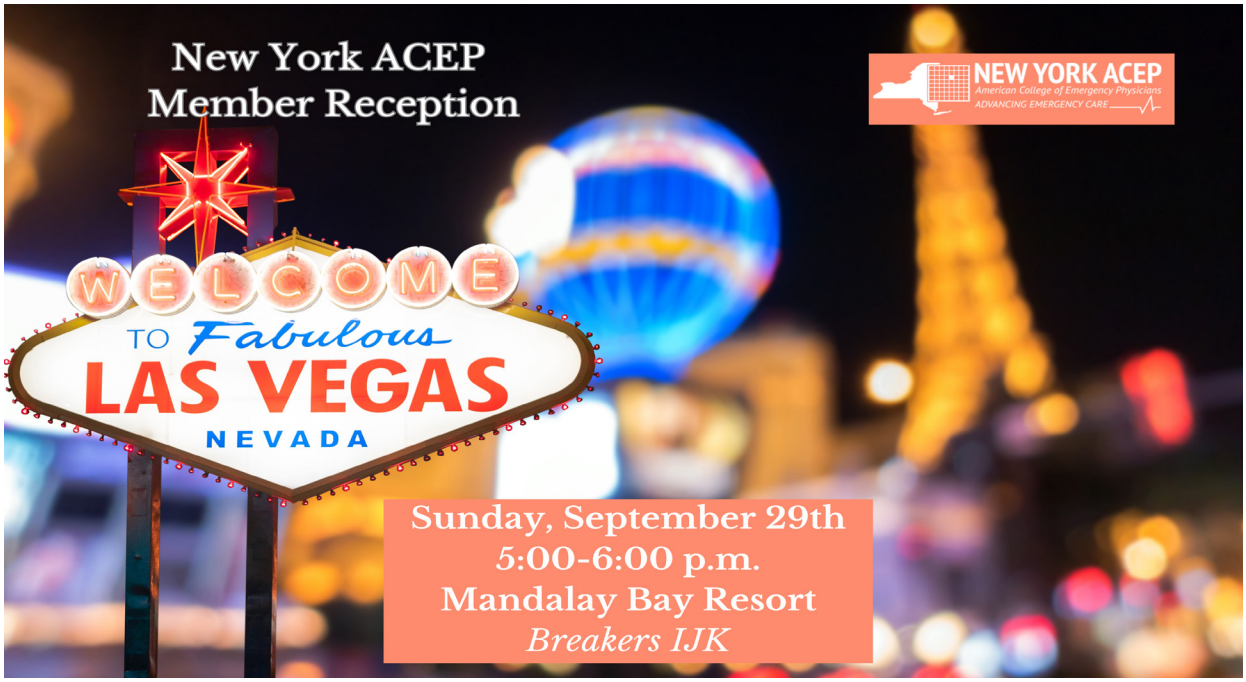
Thank You, New York ACEP

I would like to begin by thanking all of you, my colleagues, for the trust you have placed in me to lead our chapter over the next two years. On behalf of our entire board of directors, I want to thank Dr. Nicole Berwald for her tremendous leadership, mentoring and friendship. Dr. Berwald ensured the success of several NY ACEP initiatives during her tenure including our OWL (Opportunities for Women in Leadership) and ACE (Academy of Clinical Educators) programs and Workplace Violence Prevention Alliance in which we partnered with several nursing organizations such as NY-ENA, ANA-NY and NYSCENA. Additionally, she guided a robust advocacy agenda including successful opposition to PA independent practice, reductions in the excess malpractice coverage and continuing to voice our concerns around NP scope of practice issues. Dr. Berwald will continue to guide our work as she transitions to Immediate Past President. Thank you, Nicole!

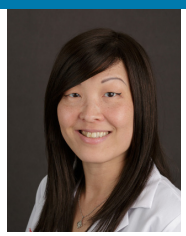
We have also just completed a very successful NY ACEP Scientific Assembly at the Sagamore Resort on Lake George. In addition to the opportunity to catch up with old friends and make some new ones, we had great CME from our excellent speakers and we heard the latest updates on ACEP from our President, Dr. Aisha Terry. I am also happy to report we have returned to our pre-Covid attendance with just under 300 registered attendees and over 30 exhibitors. I want to thank our education committee for putting together another great CME program and they are already at work on reviewing the feedback and planning for the 2025 meeting.

In June, members of the board and committee chairs attended a strategic planning meeting to help set the priorities of the organization over the next two years. We reviewed the data from the membership survey that was sent out and while we only received a small number of responses, it was clear our focus needs to be on the practice environment for emergency physicians in New York. We will continue to advocate in Albany for legislative changes that improve our practice environment and don't place undue burden or unfunded mandates on our already overtaxed emergency departments. The team also discussed a plan for how we can better communicate what NY ACEP is doing on behalf of you, our members, to make your work environment better and we are hard at work revamping our website which should launch this fall as well as enhancing our methods of communicating both within the organization and externally.

Hopefully everyone enjoys the rest of the summer and gets the opportunity to take some time off with family and friends for some well-deserved rest. I look forward to hearing everyone's concerns and suggestions.



SOUND ROUNDS



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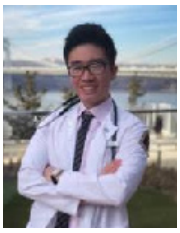

Guest Author
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Lend me Your Ear: Diagnosis of a Preauricular Abscess

Case Presentation

A 50-year-old female with a past medical history of a right preauricular sinus tract, previously complicated by abscess requiring aspiration presented to a community Emergency Department (ED) with four days of worsening right ear pain associated with chills. She had initially been evaluated on day one of symptoms at an urgent care and was prescribed ciprofloxacin without improvement. This was followed by the addition of cephalexin at a second visit, however her pain significantly worsened and therefore presented to the ED for a third visit.

On exam, there was moderate swelling, erythema and warmth of the superior aspect of the right helix and crus of the helix, with induration superior to the tragus (Figure 1). Examination for fluctuance was limited due to significant hyperesthesia of the area. A point-of-care ultrasound was performed with a high-frequency linear probe with a copious amount of gel to prevent any additional pressure to the area. The ultrasound demonstrated a 1.8cm x 0.8cm x 0.7cm anechoic collection just superior to the tragus (Figure 2). We identified an optimal point of needle entry after visualizing surrounding vasculature on color doppler (Figure 3). An 18g needle was used to perform an aspiration and drainage, which removed 1cc of purulent material with significant improvement in pain. The patient was treated with vancomycin and piperacillin/tazobactam and was admitted for IV antibiotics and observation. Ultimately, a wound culture resulted as Enterococcus faecalis infection and the patient was successfully discharged with oral antibiotics.

Discussions

Preauricular sinuses are uncommon congenital malformations that can manifest as superficial dents, dimples or openings typically anterior to the crus of the helix[1]. Preauricular sinuses usually remain asymptomatic for most patients; however, these sinuses are at risk of developing inflammation and infection, with typical early symptoms including pain, erythema, warmth and edema of the preauricular region[2]. If left untreated, underlying infections can develop into abscesses that can affect nearby structures such as the facial nerve or the auricular cartilage itself, potentially leading to facial nerve palsy and perichondritis, respectively[3]. The relative rarity of preauricular sinus abscesses in the population at large can also lead to under-diagnosis of the condition, as it could be clinically mistaken for otitis externa, perichondritis or superficial cellulitis. As a result, prompt and accurate identification of preauricular sinus infections are key to preventing morbidity.

The majority of preauricular sinus infections are caused by Staphylococcal species, with other less common culprit organisms belonging to the Streptococcus, Proteus, and Peptococcus families[2]. Antibiotics with coverage of these species, such as cephalexin or amoxicillin-clavulanate are appropriate first-line medications. If an abscess is identified, needle aspiration and drainage or incision and drainage are indicated. In this case, an Enterococcal species was isolated as the causative organism, possibly through fecal-facial contamination.

Ultrasonography of preauricular sinus abscesses can reveal pockets of purulence that may then be targeted by needle aspiration. In our case, the patient's preauricular abscess appeared as a pocket of heterogeneous echogenicity just below the skin, allowing drainage without needing to violate nearby cartilage. By utilizing POCUS, we were able to adequately characterize the underlying pathology that led the patient to seek a medical evaluation three times in one week while avoiding CT irradiation. This case therefore illustrates the utility of bedside POCUS to identify preauricular sinus infections and guide subsequent management.

SOUND ROUNDS

Indications

- Erythema
- Fluctuance
- Preauricular pain
- Preauricular pit
- Swelling
- Warmth

Pitfalls and Limitations

- Pain in affected areas may limit the ability to perform bedside POCUS; in these cases it may be useful to use copious amounts of gel to minimize pressure-induced discomfort or to treat with a topical anesthetic prior to imaging
- Patients with prominent preauricular lymph nodes, aberrant vasculature or a parotid mass could appear similar to anechoic abscesses on POCUS. Using color flow or pulsed wave Doppler modes can help clarify the identity of the visualized structures.

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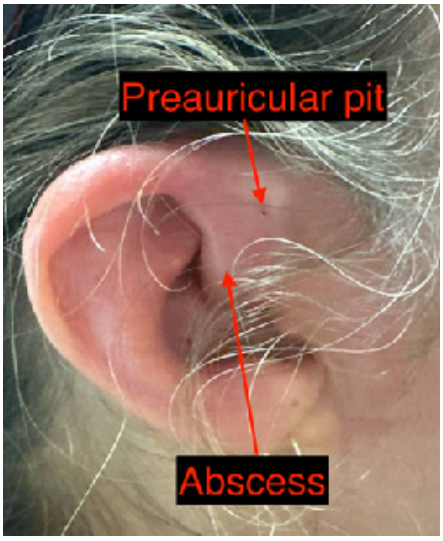

Figure 1: Image of outer ear with preauricular pit and adjacent area of fluctuance.

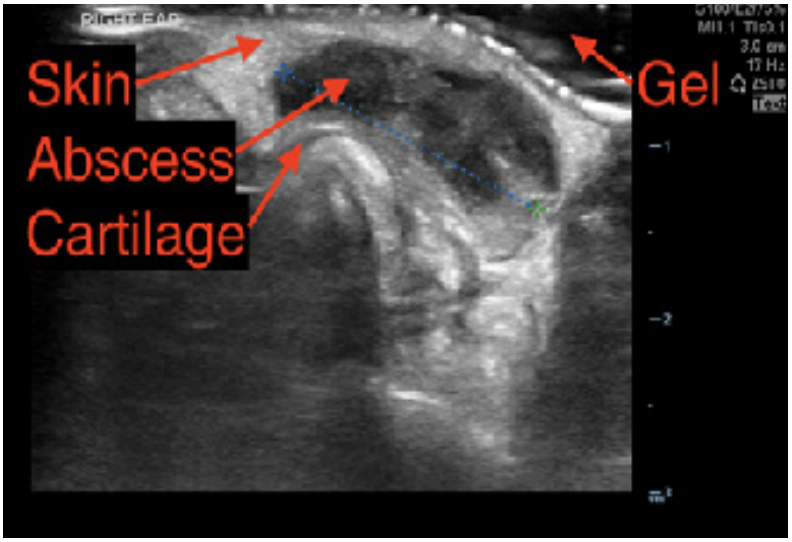

Figure 2: Ultrasound of a preauricular sinus abscess in longitudinal view, with internal heterogeneous echogenicity using a linear transducer.

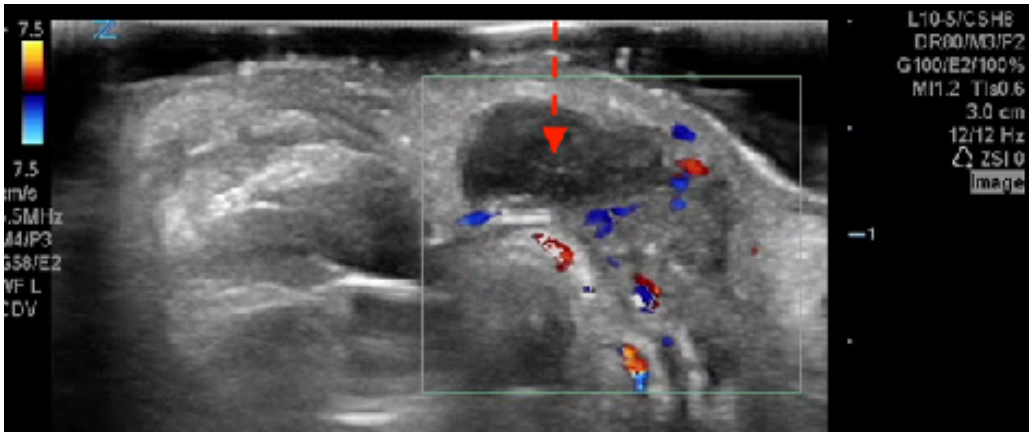

Figure 3: Color flow Doppler illustrating optimal area of needle entry (dashed arrow).

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Progressive Emergency Physicians

Career Transitions for Emergency Physicians

Emergency medicine practice is defined by the clinical practice and activities of physicians 24/7/365. This day-to-day practice, chasing the proverbial chart rack and providing a safety net for the healthcare system is often equally rewarding and frustrating at times. A good perspective on the good being done for patients on their worst days can offset the challenges that lead to burnout or moral injury. The 24/7 demanding nature and shift work can also be a challenge for us as we proceed through careers in emergency medicine. If one reaches a time when a change from a full-time clinical role there are many options for emergency physicians.

The most obvious is intermixing clinical work with other roles. While some choose to decrease clinical hours without supplementing with other professional roles, there are options to share time between clinical hours and other roles in the hospital. These can include faculty roles and teaching. Involvement in student, resident and/or fellow education. Some of these roles can require additional training of varying degrees. This can range from courses, schooling, CME events, up to taking on a fellowship to become proficient and be a valuable resource to programs and trainees.

Administrative roles within the department or hospital can substitute for clinical work as well. These can be within department leadership, quality management, physician advisor/ utilization management or hospital administration. Some of these roles allow for joint clinical practice while others may lead to a decision to leave clinical practice. Health system roles including population health, utilization management and physician executive positions are increasingly common in health systems. There are many organizations, training programs and certifications that can be obtained to prepare or support development in these roles. Shadowing or taking on smaller administrative responsibilities while deciding on change can allow for clarity on what the roles require and the different type of cognitive load they can impart.

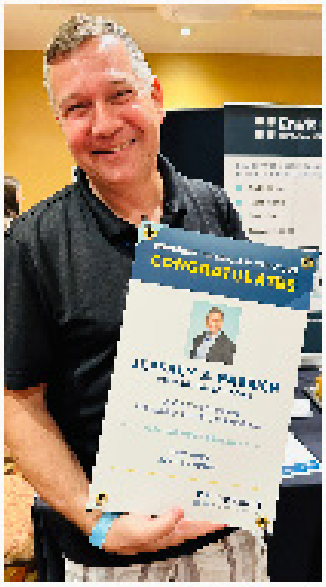
Often, maintaining clinical practice but in different roles and environments can reinvigorate practice. Telehealth positions have rapidly expanded in the post- COVID era. Benefits include the ability to continue standard emergency medicine practice while allowing for more time at home or even travel while providing these services. State regulations can vary both related to physician and patient location and often these services require licensing in multiple states. Splitting time between different emergency department environments can change perspective and allow for informed career decisions. Urgent care opportunities exist as shared or alternate career paths with lower acuity and allow for experiencing practice and patient case variety. The practice patterns in high vs lower acuity sites, trauma centers versus general emergency departments, travel work to different regions or working at facilities that staff observation units/programs are all ways to change the daily practice environment provide new opportunities and reinvigorate a physician's career.

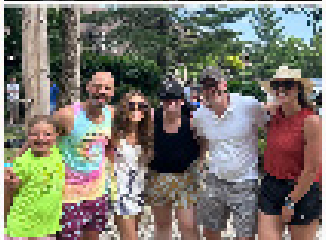
Consulting work is a regularly available option. Public and private sector roles exist. There are roles related to government agencies and review panels. These can include policy, professional conduct and licensing roles. Legal consultancy is a well-known field. Malpractice review for credibility and service as expert witnesses for cases is commonly performed by many physicians. Those pursuing these roles should be mindful of the precedent they can set and uphold the highest ethical standards. Medical practice consulting is a more targeted field using your experience and knowledge base to assist other practices and programs grow, develop and improve. These roles can be broad or specifically targeted (i.e.: patient experience, throughput, new service line development, quality improvement). Lastly, industry opportunities are often the most abundant. These can include medical device, research, pharmaceutical and product advising. Medical technology companies employee "super- users" to assist in product implantation and roll- out. Publications, both medical and general, have medical writer and editor roles for those strong in the written word. Consulting is not limited to the medical field but the knowledge and experience emergency physicians possess is valued in the business and finance fields offering guidance on investments, products or corporate healthcare.

A major field growing worldwide and rapidly entering the medical arena is related to technology and informatics. Specifically, the role of artificial intelligence in the practice of medicine. Artificial intelligence will lead to the most significant changes and likely greater changes, to medical practice since conversion to electronic medical records. In addition to many consulting opportunities that already exist for physicians with the breadth of knowledge about the healthcare system that exists in emergency medicine practice, there are numerous roles currently and growing in these information technology fields. Consulting roles and for those with the background technical expertise, development/design opportunities are available and expanding on a rapid timeline. In addition to industry opportunity related to artificial intelligence there will be plentiful opportunities for career development via research and incorporation of these technologies into the clinical environment.

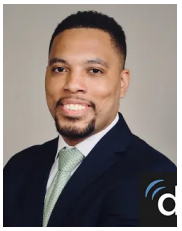
Adjusting clinical workload and embracing alternate opportunities and experiences can reduce burnout and provide a new outlook for actively practicing emergency physicians regardless of career stage. Times of career experimentation or transition can allow for mental clarity and the opportunity to focus on physical wellbeing and personal pursuits. Many organizations and training programs exist to allow physicians to grow their knowledge base in preparation for alternate or coexisting career paths and ACEP has many educational opportunities, section and networking options to professionally develop. The breadth of emergency medicine practice and centrality in the health care system of emergency medicine allow emergency physicians to be uniquely positioned to take on many roles through the healthcare spectrum and beyond healthcare.

Scientific Assembly





EMERGENCY MEDICINE RESIDENT COMMITTEE



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Management of Ventriculoperitoneal Shunts in the Emergency Department

The ventriculoperitoneal shunt (VPS) is a rarely encountered but often intimidating device that can present with many complications. This article discusses the indications and complications of VPS and its management in the emergency department (ED).

Introduction

The ventriculoperitoneal shunt (VPS) is a device that diverts cerebrospinal fluid (CSF) from the cranial vault to the abdominal cavity, or the peritoneum. Ventriculoperitoneal shunts are placed for various reasons with some 30,000 inserted yearly.[1] Although shunt insertion is a common neurosurgical procedure, revision rates are high in the pediatric population and complication rates in adults range between 17-33% annually.[2] Emergency physicians will encounter patients with shunt complications and must know the appropriate troubleshooting techniques in the ED.

Indications

Hydrocephalus results from abnormal or excessive cerebrospinal fluid accumulation (CSF) and is the main indication for VPS insertion. CSF is created and circulates within the ventricular system, which consists of four ventricles within the brain. The term, communicating hydrocephalus is used when CSF is unable to be reabsorbed into the body, while non-communicating or obstructive hydrocephalus occurs when there is a physical blockage within the ventricles.[3] There are several causes of hydrocephalus which may warrant VPS insertion; these include: normal pressure hydrocephalus, idiopathic intracranial hypertension, complications from subarachnoid hemorrhage, a variety of congenital disorders (i.e. Dandy-Walker, variants of spinal bifida), malignancy and infection due to cytomegalovirus, rubella, and toxoplasmosis.[4]

The VPS consists of four components: a proximal ventricular catheter, a one-way valve, a reservoir and a distal peritoneal catheter.[4] The valve and reservoir are housed together under the scalp. The standard valve continuously drains CSF when the ventricular pressure is greater than 10 mmHg, while some valves are programmable with a pressure gauge set for an adjustable flow rate.[1] The VPS runs from the ventricular system out of the skull and under the scalp as it traverses down into the peritoneal cavity beneath the skin by way of the neck and chest wall. Other alternatives to VPS include shunting to the atria, lung space or more invasive interventions like ventriculostomy.

Complications

VP shunt-related complications present with a variety of vague symptoms. The chief complaints of VPS-associated failure include headache, fever, nausea, vomiting, abdominal pain, lethargy, ataxia and mental status changes including coma.[6] These symptoms can arise suddenly or over several days.[6] In the presence of a severe increase in intracranial pressure (ICP) secondary to VPS failure, patients may present with a decreased level of consciousness, changes in personality and cognition, seizures and bradycardia.[7] The most common causes of VPS malfunction include functional failure, mechanical failure and infection.

Functional VPS failures occur in the setting of over-drainage or slit ventricle syndrome and under-drainage. Over-drainage leads to a reduction in CSF volume and puts patients at risk for subdural hematomas secondary to tearing of the bridging veins.[8] The slit ventricle syndrome is a result of over-drainage resulting in small ventricular size on radiographic imaging.[9] These patients may present with headaches and nausea that are exacerbated in the upright position. The factors that may contribute to over-drainage are most notably inherent valve malfunction. VPS under-drainage results from tissue occluding the apertures of the proximal shunt apparatus and will present with worsening hydrocephalus on brain imaging.

Mechanical failure may arise from misplacement, migration, disconnection and/or fracture of the VPS apparatus.[10] The most common location for a fracture is along the clavicle or lower ribs. Migration occurs when a correctly placed catheter shifts and drainage is partially or completely compromised.[10] Misplacement is the earliest sign of mechanical failure due to insertion into the brain parenchyma, temporal horn or choroid plexus with post-operative signs of shunt failure. Disconnection typically occurs shortly after insertion and may result in fluid may accumulate at the skin site around the disconnection.[10]

Infection is the second most common cause of shunt failure and carries a risk of severe morbidity and mortality.[11] Most VPS infections occur within the first two months after placement and are often due to skin flora such as staphylococcus aureus and epidermidis.[7,12] Patients with internal infections involving the shunt and CSF may present with altered mentation, headache and meningismus. Those patients with an external infection involving the tissue surrounding the shunt will present with local swelling, erythema, and tenderness.

Some patients may also experience abdominal complications as a result of increases in abdominal pressure or pseudocyst formation.[10] A pseudocyst may form around the distal end of the peritoneal catheter and if large enough can cause severe abdominal pain. Computed tomography is the best imaging modality to assess for abdominal pseudocyst formation.

Management

The first part of the assessment for patients with VPS is to obtain a thorough history and neurological examination. On physical examination, clinicians should palpate for the reservoir and the valve below the scalp to identify any disconnections under the skin, overlying skin changes and

overall appearance. A gentle reservoir compression can provide emergency physicians with information regarding proximal versus distal obstruction with a difficult compression representing a distal flow obstruction whereas a slow refill may suggest a proximal obstruction.[10]

The most common radiologic studies in patients with concern for VPS failure included CT of the brain and a shunt series X-ray.[13] A shunt series includes an anteroposterior (AP) and lateral view of the skull, chest and abdomen to identify any mechanical causes of VPS malfunction such as fracture or displacement of the system. The skull X-ray may also provide information on the specific shunt used (i.e. Codman, Integra, Sophysa) and its current settings. These settings and valve type should be documented for future reference. In the context of significant clinical suspicion of shunt failure, neurosurgical consultation should be sought for further guidance.

In rare instances, VP shunt tapping or collection of CSF is indicated. CSF should be collected for patients that present with fever or high suspicion of VPS-associated infection. It is controversial within the literature whether VPS tapping is safe when a lumbar puncture will provide the same information and lower the risk of infection.4 Either can be performed, but neurosurgical consultation is advised. In the case of a decompensating patient, a VPS tap is reasonable, which will allow for the removal of excess CSF. To withdraw CSF from the reservoir under the skin, use a butterfly needle, IV tubing and a syringe under a sterile technique. Shunt pressure can be measured using a manometer from a lumbar puncture kit.

In the face of shunt failure, a rapid increase in ICP may occur and can result in herniation. When suspected, emergency medicine physicians must employ measures to reduce ICP whether by intubation and hyperventilation, hyperosmolar therapy and/or emergent neurosurgical decompression.

Conclusion

VPS are devices that emergency medicine physicians frequently encounter. These devices are prone to several complications along the apparatus with potentially devastating consequences. Providers must be skilled in diagnosing and treating acute VP shunt complications. The evaluation should begin with a thorough history and physical examination, followed by appropriate imaging, procedures, and prompt neurosurgical consultation if necessary.

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NYACEP Committees

Participation at the committee level is a great way to introduce yourself into the activities of New York ACEP. Committee member appointments are made by the President in consultation with the committee chair. Members with specific interests or expertise are encouraged to apply for committee membership.

EDUCATION:

This committee is responsible for assuring the availability of high-quality undergraduate and graduate education in emergency medicine and will be the key provider of continuing education in emergency medicine in New York State.

EMS:

The EMS Committee provides medical leadership in the advancement of the state EMS system.

EM RESIDENT COMMITTEE:

The EMRC provides a unified voice for emergency medicine residents in New York State.

GOVERNMENT AFFAIRS:

The Government Affairs Committee is New York ACEP's key advocate for high-quality emergency care and public policy relating to emergency medicine and the recognized authority on emergency medical issues.

PROFESSIONAL DEVELOPMENT:

This committee is responsible for promoting the value of ACEP membership, enhance communication and increase participation of its varied membership.

RESEARCH:

The Research Committee fosters and supports emergency medicine research and research education in New York State. It is responsible for developing a statewide network of emergency medicine investigators and clinicians positioned to develop data to create an agenda for the future of emergency medicine in New York State.

PRACTICE MANAGEMENT:

This Committee promotes safe, efficient and high-quality patient care practiced in a fair, equitable, safe and supportive environment and assists members in gaining greater influence over their practice environment.

Complete Your Committee Interest Form Today!

EDUCATION

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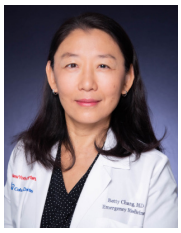

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Mentoring for Success in Medicine: A New York City Pipeline Program

MAPP to CU is a pipeline program developed in New York City in 2021. This article highlights its utility as both an educational initiative and a Social Emergency Medicine initiative.

Disparities in educational and mentorship opportunities for students of color and students from disadvantaged backgrounds are a major contributing factor to underrepresentation of people from underserved backgrounds in medical school enrollment and the physician workforce. This underrepresentation significantly negatively impacts the educational experience of all medical students[1] and the healthcare of patients from these populations. When cared for by physicians who have similar backgrounds, patients from underrepresented populations have improved access to healthcare, higher satisfaction with their healthcare and increased acceptance of preventative services.[2-5]

Despite the critical importance of increasing the proportions of students and physicians from underrepresented populations, the number of medical school applicants from these populations remains alarmingly low. Data from the Association of American Medical Colleges for 2023-2024 shows that of 52,577 medical school applicants, only 4,672 identified as Black/African American and 3,177 as Hispanic/Latino. Of the students who began their first year of medical school in 2023, 1,493 (12.7% of matriculants) identified as Hispanic/Latino, a slight increase compared to the previous year. However, the number of students who identified as Black/African American decreased to 1,845 (10% of matriculants).[6]

How can we address this underrepresentation in medical schools? A solution lies in reaching out to students early on in their educational experience and ensuring the pool of medical school and other healthcare professional school candidates is large enough to adequately represent and serve patients from disadvantaged populations. Pipeline programs are instrumental in this effort. They serve to spark interest in medicine from an early age and guide young people in achieving future success in a healthcare career. This premise underlies the Mentorship and Pipeline Program at Columbia University (MAPP to CU) founded in 2021 by the Columbia University Irving Medical Center (CUIMC) Department of Emergency Medicine Social Emergency Medicine Committee.

Research suggests that mentorship programs in healthcare can be effective in increasing high school students' interest in healthcare professions.[7,8] These programs often involve pairing students with medical professionals for mentoring, job shadowing and interactive sessions.[9,10] They can be particularly beneficial to students from underrepresented backgrounds. Follow-up studies have demonstrated that participants in these programs are more likely to remain committed to healthcare careers and pursue relevant post-secondary education.[7,10] Early exposure through volunteering and shadowing opportunities has also been associated with increased interest in medical education and positive adolescent development.[11] Overall, mentorship programs appear to be a promising strategy for encouraging high school students to consider and pursue healthcare careers.

Mentorship programs like MAPP to CU have been established throughout the country at other academic institutions. Hospital-based multidisciplinary mentoring initiatives have demonstrated positive impacts on students' decisions to pursue healthcare careers, with high rates of enrollment in health science degree and pre-medical programs.[12] These mentorship initiatives offer hands-on activities, networking events and career panel discussions to help students better develop an understanding of the healthcare professions.9 Such initiatives not only promote diversity in healthcare but also contribute to creating a workforce that better reflects and serves diverse communities.[9,11]

EDUCATION

MAPP to CU is a two-year longitudinal pipeline program that partners the CUIMC Department of Emergency Medicine with local high schools. Students from these high schools attend monthly workshops

at the medical center campus. Emergency Medicine faculty and trainees and other healthcare providers mentor these students and teach practical healthcare-related skills. Participating high school students represent and reflect the communities served by CUIMC and many are from households where English is not the first language.

Topics covered during the skills-based MAPP to CU workshops include chest compressions, airway management, Stop the Bleed skills, suturing, splinting and bedside ultrasound. These workshops were designed to provide both background education and hands-on experience to pique interest in healthcare. Students learn vital signs, CPR and tourniquet skills that may someday prove crucial and lifesaving within their communities. Also, through these workshops, students are exposed to variety of healthcare professions such as pre-hospital care, nursing, pharmacy, social work and physical therapy.

During their second year in MAPP to CU, students further explore careers in medicine and healthcare with professionals from other specialties including surgery and pediatrics. Students participate in more advanced activities such as a toxicology walk and a comprehensive simulation incorporating skills learned in the first year. Additionally, second-year students are mentored one-on-one in conducting research on a medical or healthcare topic of interest and presenting their findings to their peers. This activity provides students with experience in the process of formulating and answering a research question and communicating their findings. It also promotes self-efficacy and intellectual curiosity.

For high school students, participation in extracurricular activities increases their success in the college application process and facilitates self-discovery. However, for students from lower-income households, afterschool activities often compete with jobs students may need to contribute income to their households. To help address financial barriers that may prevent students from participating in MAPP to CU, students are given gift cards based on their attendance.

MAPP to CU recently completed its third year and celebrated its first class of alumni returning for the second class's graduation. Thus far, we have noticed students becoming increasingly more confident as they progressed through the program. Many students began the program needing translation services because English was not their first language. At the end of the two-year cycle, many were able to present independently in English their research on complex medical and healthcare topics. Additionally, with increased confidence levels, these students have aspired to goals that may have previously seemed unrealistic or impossible. With the most recent class of MAPP to CU graduates, several students developed plans to pursue careers in nursing and surgery because of their participation in MAPP to CU. The long-term impact of this pipeline program on the participating students and their communities is still unfolding. We are optimistic that students will remain engaged and continue their paths towards careers in medicine and healthcare with MAPP to CU supporting them.

In summary, like other pipeline programs, MAPP to CU aims to address the educational and mentorship needs of students from racial, economic and social backgrounds historically underrepresented in medicine and improve the representation of these students in medical student enrollment and the physician workforce. More specifically, MAPP to CU focuses on students from the population the CUIMC Emergency Department serves. When developed, the overarching goals of MAPP to CU were to provide underrepresented students with opportunities they would not have had otherwise and to increase diversity in the healthcare workforce by exposing these students to healthcare careers and supporting them in their healthcare career aspirations. With the successful graduation of two MAPP to CU classes, we believe we are well on our way to achieving these goals.

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Citizenship in the Workplace: Bridging the Gap Between Perception and Reality

In today's competitive business environment, the concept of citizenship in the workplace has become increasingly important. This applies to medicine as well, especially in large cities where numerous health systems are competing for market penetration, desirable payer mix & favorable rankings by U.S. News & World Report, Leapfrog, Healthgrades and others.

However, there is often a disconnect between employees' understanding of citizenship in the workplace and what senior leadership or management feel exhibits a good citizen of the organization.

So, what exactly is citizenship in the workplace?

An employee often believes that showing up on time and completing their assigned tasks is enough to be considered a good citizen.

However, to employers it refers to employees going above and beyond their job responsibilities to contribute positively to the overall success of the organization. This disconnect can lead to confusion, conflict and ultimately affect the overall morale and productivity within the workplace.

Citizenship in the workplace are the behaviors, attitudes and actions of members of the organization that aren't simply in the job description. It encompasses elements such as helping others, displaying a positive attitude, being proactive and contributing to the overall success of the organization.

One of the key aspects of citizenship in the workplace is the willingness to **partner** with others. This could involve assisting a colleague with a project, sharing knowledge and expertise or simply offering to listen. By being a teammate and supporting colleagues, you not only build strong relationships but also contribute to a positive and collaborative work environment.

Another important aspect of citizenship in the workplace is displaying a **positive** attitude. Positivity can 'go viral' and can help uplift the spirits of those around you. By approaching your work with enthusiasm and optimism, you inspire others to do the same.

Being **proactive** is also a crucial component of citizenship in the workplace. This means taking initiative, being available even after business hours, looking for opportunities to improve processes and being proactive in finding solutions to problems as opposed to simply pointing out problems. By being proactive, you demonstrate your commitment to the organization.

Contributing to the overall organizational success is the most critical aspect of citizenship in the workplace. This could involve going above and beyond your job responsibilities, taking on additional tasks, or actively participating in initiatives that benefit the company as a whole. By contributing to the organization's success, you not only demonstrate your dedication but also help create a culture of excellence and achievement.

In conclusion, citizenship in the workplace is a vital aspect of organizational success. By exhibiting behaviors such as helping others, displaying a positive attitude, being proactive and contributing to the overall success of the organization, employees can not only enhance their own performance but also contribute to a positive and thriving work environment. It is essential for both employees and management to have a shared understanding of what constitutes good citizenship in the workplace in order to foster a culture of collaboration, productivity and success.

Research

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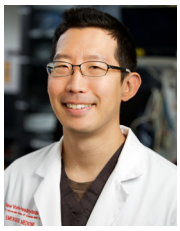

Edward H. Suh, MD
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Director of Evidence Based Practice
Columbia University College of Physicians & Surgeons

Updates in Emergency Syncope Research

The year is 2026. A 60-year-old female with a past medical history of smoking, obesity and hypertension presents to the Emergency Department (ED) after losing consciousness while waiting for the bus. She remembers feeling light-headed prior to fainting, but had no chest pain, palpitations, headache or shortness of breath before or after the episode. She ate a normal breakfast this morning and has not changed any of her hypertension medications. There was no head or neck trauma, as she was slowly lowered to the floor by a kind bystander. This has never happened to her before. In the ED, her vital signs are normal, except for mildly elevated blood pressure (142/82) and her physical exam is entirely unremarkable. Her ECG reveals a normal sinus rhythm without acute ischemic changes and normal intervals. You ordered a chest x-ray and blood work, including a high-sensitivity troponin and these have all returned within normal limits. She has never had an echocardiogram performed. She is worried about this episode of syncope and is asking you why she passed out. Does this patient need admission to the hospital for further testing and monitoring?

Challenges in acute syncope care

Syncope continues to be a common reason for patients to present to the ED. As the US population ages, we can expect to see an increased number of patients with this complaint. Finding the exact etiology of the syncopal event remains a challenge for emergency physicians; though patients frequently ask us why they fainted, it is too often a question we cannot answer. There are two primary objectives in the emergency department evaluation of syncope: diagnostic and prognostic. The first objective is to uncover an acute serious diagnosis that may be associated with or have caused, the syncopal event, such as pulmonary embolism or cardiac dysrhythmia. The second objective is to accurately risk-stratify the patient to determine the intensity of care which would be appropriate in the short-term. Additional investigations, such as in-patient cardiac monitoring and echocardiography are often ordered, but are generally low yield. Risk stratification of patients with unexplained syncope has been a focus of clinical research for over two decades and many clinical decision tools have been published. Despite these efforts, no clear winner among these many tools has emerged, though there is ongoing research that may shed light on this issue. Further, the management of patients with syncope in the ED will be the focus of the next GRACE clinical practice guidelines from the Society of Academic Emergency Medicine (SAEM) that will be published in 2025. These guidelines will explicitly focus on, among other topics, the validated risk-stratification tools currently available. Meanwhile, new analytic approaches using artificial intelligence could provide the next frontier in clinical risk-stratification for ED patients with syncope.

Risk-stratification tools still need external validation

A recent scoping review found 19 different risk-stratification tools for patients with syncope.[1] The majority of these had neither been externally validated nor compared with unstructured physician gestalt. Perhaps the most recognizable of these, the San Francisco Syncope Rule, was found to have inadequate sensitivity in subsequent validation studies.[2,3] The more rigorous Canadian Syncope Risk Score has been validated in a multicenter study in Canada, but not has not been studied in the US.[4] The FAINT Score, which was derived in a large, multicenter cohort of older adults in the US is pending external validation.[5] Fortunately, there is an ongoing NIH-funded, multicenter study named "PACES: Practical Approaches to Care in Emergency Syncope" which is nearing completion and could significantly advance this field of research. Data collection will be completed in fall 2024. Results from the PACES study will provide external validation for and compare performance of, the Canadian and FAINT scores, as well as comparing both to unstructured physician gestalt.

Potential applications of Artificial Intelligence

Researchers have begun to apply various artificial intelligence (AI) techniques, such as machine learning and deep learning, to clinical risk-stratification problems. With a large and accurately labeled dataset, machine learning could theoretically provide highly accurate risk-stratification for patients with unexplained syncope. One key challenge to this is that retrospective clinical data, while plentiful, often lacks complete and accurate information on clinical outcomes post-discharge, while prospective datasets generally do capture follow-up, but lack the scale required to properly train such AI models.

However, there is exciting work emerging that hones in on a more specific clinical question in the management of ED patients with syncope – whether the patient would benefit from an echocardiogram. A deep learning model, named EchoNext, was recently developed to predict the results of an echocardiogram using a 12-lead ECG alone.[6] This model was trained on over 425,000 ECG-echocardiogram pairs using significant structural heart disease as the primary outcome. It is currently undergoing external validation in a cohort of adult ED patients with unexplained syncope and if validated, could help optimize echocardiography utilization, a test that is often ordered but rarely changes clinical management.

Need for implementation research

Both conventional and AI-based tools will need to be thoughtfully implemented to have a beneficial real-world impact on patients. Some specific challenges are foreseeable. One is acceptance. Physicians are known to have "algorithm aversion", that is, "the tendency of humans to shy away from using algorithms even when algorithms observably outperform their human counterpart".[7] Another is workflow integration. Significant cooperation between clinicians, bioinformaticists and organizational leaders

will be necessary to make sure tools built into electronic health record systems can be meaningfully used within the context of actual clinical care. And finally, even if these tools are successfully implemented, we will need properly conducted clinical trials to demonstrate the sustainable and positive impact on patient-oriented outcomes of these new tools.

You apply a well-validated syncope risk-stratification tool to the case and determine that the patient is at low risk (under 2%) for serious adverse events at 30 days. The AI model automatically analyzes her ECG and suggests that she is at very low risk of having clinically significant structural heart disease. After discussing all of the findings in her workup and your overall assessment, the patient feels reassured. You and the patient reached a shared decision to discharge her home to follow-up with her primary care doctor in the next week.

Disclosure

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Leadership Elected

Congratulations are extended to the newly elected Board members.

Erik J. Blutinger, MD MSc FACEP
Mount Sinai Health System

Mark Curato, DO FACEP
NewYork-Presbyterian/Weill Cornell Medicine

Abbas Husain, MD FACEP
Staten Island University Hospital

Jeffrey J. Thompson, MD FACEP
UBMD Emergency Medicine

Scientific Assembly

Residency Volleyball Challenge
July 10, 2024



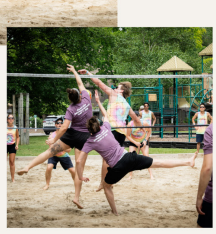



2024 Volleyball Champions
University at Buffalo









Scientific Assembly

The 2024 Scientific Assembly at the Sagamore Resort featured expert faculty members: Robert S. Hoffman, MD FAACT FACMT FRCP Edin FEAPCCT; Jennifer Beck-Esmay, MD FACEP; Anand Swaminathan, MD MPH; Aisha T. Terry, MD MPH FACEP; David Andonian, MD; who wowed 300 emergency medicine physicians from around the state. Twenty-nine companies participated through exhibits and support.

Lifetime Achievement

Established Researcher

Advancing Emergency Care

EMS

Awards

Each year New York ACEP honors individuals for significant contributions to the advancement of emergency care. New York ACEP member, Rahul Sharma, MD MBA FACEP was presented with the 2024 Advancing Emergency Care Award. Michael T. Benenati was presented the Michael G. Guttenberg Outstanding Contribution to EMS Award; Jeremy Cushman, MD MS EMT-P FACEP FAEMS was presented with the Physician of the Year Award and Joel M. Bartfield, MD was presented the Edward W. Gilmore Lifetime Achievement Award.

The Established Researcher Award was presented to Alex Manini, MD MS. The Rising Star Research Awards were presented to Utsha G. Khatri, MD MSHP and Dana Sacco, MD MSc.

Leadership Elected

Congratulations are extended to the newly elected Board members: Erik J. Blutinger, MD MSc FACEP, Mount Sinai Health System, Mark Curato, DO FACEP, NewYork-Presbyterian/Weill Cornell Medicine, Abbas Husain, MD FACEP, Staten Island University Hospital and Jeffrey J. Thompson, MD FACEP, UBMD Emergency Medicine.

New Speaker Forum

Congratulations to Brendan Freeman, DO, Staten Island University Hospital, recipient of the award for best presentation for *Tick, Tick ... Boom!*

Research Forum Winners

Tuesday's program included the Research Forum featuring oral and poster presentations. Congratulations to the following research presenters who took the annual award in their category.

Oral Presentation

- Is There an Association Between Emergency Department Overcrowding and Emergency Medical Services Redirection?
  Mukund Mohan, MD, Staten Island University Hospital

Poster Presentations

- Interdisciplinary Pediatric SIMtervention Using Rapid Cycle Deliberate Practice In-Situ Simulation in the Emergency Department
  Lauren Cooke-Sporing, DO, South Shore University Hospital
- Boosting Confidence and Skills: A Multidisciplinary Evaluation Post-Implementation of an Emergency Department-Based Procedure Team
  Danielle Langan, DO, Staten Island University Hospital
- Rapid Outpatient Discharge of TIA and Minor Stroke: RAVEN Clinic
  Meika Folkerts, AB, Columbia University Irving Medical Center
- Development of a Machine Learning Model to Predict Alcohol Withdrawal Complications in Trauma Patients
  Monique Arnold, MD, Icahn School of Medicine at Mount Sinai

Rising Star Research Award Recipients

Leadership and Advocacy Award Reflections

Samuel Sondheim, MD MBA
Assistant Medical Director, Department of Emergency Medicine
Mount Sinai Morningside
Assistant Professor of Emergency Medicine
Icahn School of Medicine at Mount Sinai

The American College of Emergency Physicians (ACEP) Leadership and Advocacy Conference (LAC) in April and the NY ACEP Advocacy Day in February were transformative experiences. Prior to attending this series of advocacy training and experiences, I had little exposure to health policy and advocacy as my experiences were primarily in operations and clinical medicine. These advocacy experiences were transformative and served as a medium to understand how emergency physicians across our state and country embed advocacy into their regular practice. Advocacy, defined as "public support for or recommendation of a particular cause or policy" (oxford dictionary), represents opportunity to shape legislation that will potentially affect many thousands, if not millions, of patient encounters - far more than we can possibly see and treat in a single shift.

These events serve as platforms for collaboration, education and empowerment, fostering connections among emergency physicians and advocating for policies that benefit both patients and practitioners. As the first line of defense in our healthcare system, emergency medicine is constantly evolving due to new challenges. With EMTALA requiring stabilization and care for all despite these changes, emergency departments are often the first to find a way to adapt to new constraints. I believe we therefore are at the forefront of recognizing changes in the healthcare landscape and are ripe to address these issues with our respective politicians.

LAC provided a comprehensive educational program including workshops, seminars and panel discussions. We had the honor to hear from several members of congress who are physicians by trade, including several emergency medicine physicians. While some of their views may be controversial, I applaud their commitment to public service and recognize the value of ensuring that our field is represented.

The highlight of ACEP LAC, on the final day, was meeting with staff from congressional offices. This year's advocacy meetings focused on four main issues: workplace violence, due process rights, improving mental health access and medicare reimbursement. It became apparent that many of these are intertwined and all play a role in the current national boarding crisis. ACEP developed a graphic that highlights the chain reaction of boarding that were shown to congressional staff. Interestingly, most were not even familiar with the term "boarding." Our conversations were enlightening - we focused on the constraints boarding imposes on our ability to provide quality care, the frustration and workplace violence that frequently ensues from patients waiting many hours (if not days) to go upstairs and how current limited mental health access increases both of these aspects.

While the focal point of LAC may have been visits on the hill, the rest of the conference taught much more. Most notably, advocacy is a means to develop and garner support for particular recommendations or initiatives. Regardless of field or subspecialty, policy and advocacy represent ways to broaden your reach and align with government leaders. Attendees are entrusted with the opportunities to educate legislators and policy makers about the challenges facing emergency medicine in order to advocate for solutions that benefit both patients and providers and for policies that promote high-quality patient care. These conversations are crucial for raising awareness of the unique challenges facing our field, whether it be boarding, access to care, scope of practice, workplace violence or reimbursement rates - or a particular topic that is near and dear to your particular passion.

In addition to content and the hill visits, LAC naturally fostered networking throughout the three-day program. Many leaders in our specialty were present and available to brainstorm and discuss potential initiatives. There was tremendous opportunity for specific state chapters to discuss successful initiatives in training, advocacy, lobbying, ultimately improving collaboration across state lines. Evenings were flush with different dinner and networking opportunities that included legislators.

Overall, LAC serves as a premier gathering for emergency medicine leaders from across the nation. It offers a unique opportunity for physicians to enhance their leadership skills, expand their knowledge of health policy and engage with influential stakeholders in the healthcare arena. By engaging in leadership and advocacy, we have the opportunity to shape the future of our specialty and ensure that emergency medicine remains at the forefront of healthcare delivery. I thank NY ACEP for affording me this outstanding opportunity and encourage those interested in impacting policy that affects us on every shift to join the cause - I hope to see you at LAC 2025!

Leadership and Advocacy Award Reflections

Shivam Shah, MD MS, PGY-3
Mount Sinai Hospital

This year's Leadership and Advocacy Conference (LAC) was transformational. ACEP's foundational conference focusing on tackling problems facing Emergency Medicine (EM) as a specialty through advocacy and education, LAC did not disappoint. As a first time LAC attendee, I was given an opportunity to develop my advocacy skills and build relationships with fellow advocates and policymakers. The conference was filled with educational sessions, group discussions, policy briefings, networking opportunities and a trip to Capitol Hill to advocate for important legislation.

One of the introductions to LAC was the Health Policy Primer. This series consists of brief, high-yield lectures on specific topics with the aim of providing basic information regarding important concepts within healthcare policy such as Medicare for All. This section is called the Drop the Mic session and I was selected as a speaker to discuss the Payer-Physician relationship. I discussed reimbursement models such as the fee-for-service model, capitation and value based payments. I discussed various incentives, advantages and disadvantages of each and ended with a discussion on the proposed Acute Unscheduled Care Model (AUCM). Reflecting on this experience, I found educating my peers on the important topic of physician reimbursement gratifying. Having completed a Masters in health economics from the London School of Economics prior to entering medical school, giving this talk reignited my interest in further studying healthcare finance. Importantly, I also expanded my knowledge base regarding reimbursement and became excited about the work around AUCM implementation. It is inspiring to see the work being done by policy makers and advocates within EM to further our specialty by advocating for a more updated and accurate reimbursement model. As a resident physician, learning more about compensation strategies that will directly affect me and my fellow peers felt to be a personally important task.

After the short talks were completed, we heard a few 20-minute lectures that went into more specifics about the legislative and advocacy process. These lectures were inspiring because I witnessed my peers and mentors discuss the depth of knowledge they have cultivated throughout their advocacy journey. The lectures in this section also reiterated the importance of showing up and speaking out by emphasizing the power in our specific EM expertise and anecdotes. This was a recurring message throughout the conference and serves as an important theme in the advocacy world.

After the Health Policy Primer, I discussed my talk and take-home points with some of my peers. In this way, I began meeting more conference attendees and continued this at the networking receptions in the evenings. Here, I met veteran LAC attendees and formed relationships with leaders in our field. I was also able to reconnect with a few mentors that had given me advice during medical school and residency. I believe mentorship is a critical component to advocacy and career development. It was empowering to reconnect with some of my mentors in person, especially as I met some of them in person for the first time due to the COVID pandemic. One of the many reasons to be engaged with ACEP is the mentorship and connection formation. I learned so much through each of the evening networking sessions and found the opportunity to meet leaders in our field and within organized EM gratifying. It is inspiring to speak with leaders that have become successful across industries and discuss lessons learned. The diversity of thought from LAC attendees truly took me by surprise and learning from many people further deepened my interest in politics.

Outside of the unstructured format of networking, there were information-packed breakout sessions. Various breakout sessions including discussions on anti-trust in healthcare to opioid use disorder policies. One specific session was learning about strides made by congresswoman Lisa Blunt Rochester and the vital role diversity plays in providing care. Another session I found enthralling was a round table discussion on Artificial Intelligence (AI). While there is much still unknown about the exact integration of AI and large language models within healthcare, it was interesting to learn about the tools being built by public and private sector interest harnessing AI to augment their work. A motif of this discussion was the critical idea that stakeholders within EM should continue working with AI to leverage it as a way to improve patient care. By learning more and advocating for our specialty, it is integral to use AI to amplify our work as EM physicians rather than having the computational power behind AI hinder us. Besides these sessions, there were many others throughout the conference that had important takeaways that highlighted the spectrum of work being done in our specialty.

In addition to the breakout sessions and networking opportunities, one of LAC's most important functions is the actual advocacy. To prepare us for well-planned and expertly executed visits to the Hill, there were thorough, high yield briefing sessions for all conference attendees. While having worked in the United States Office of the Surgeon General and having served on a Presidential campaign in the past, these briefings were distinct from my previous experience. Learning the concrete details behind various legislation was helpful and having context for the impetus for policies was informative. Learning of the power of anecdotes while discussing topics with policymakers was inspiring to witness firsthand.

After our briefings, we organized into groups based on our state. Walking to the Hill together with the New York delegation to meet with congressional staffers and policymakers felt empowering. As a resident, I am still at the early stages of my career, yet it felt cathartic to discuss what I had learned while adding personal anecdotes of my time in the emergency department. Discussing legislation directly with the offices that have an impact and learning firsthand where various policies currently stand felt informative and inspiring. Understanding and asking questions regarding where our elected representatives stand on policies that have a direct impact on my career felt to be an important step in advocating for myself and my peers. This experience was truly special and one I plan to build on with continued advocacy throughout my career.

Overall, attending the LAC was inspiring and exciting. Learning about important topics within EM, networking with colleagues and discussing specific policies that impact our specialty was fulfilling. I am grateful to the New York ACEP chapter for the LAC scholarship which was crucial for me to attend. Finally, I feel empowered with a renewed sense of purpose to advocate on topics that impact our day-to-day careers, as individuals and as a specialty.

Leadership and Advocacy Award Reflections

Nicholas Cochran-Caggiano, MD MS, PGY-3
Emergency Medicine
SUNY Upstate Medical University

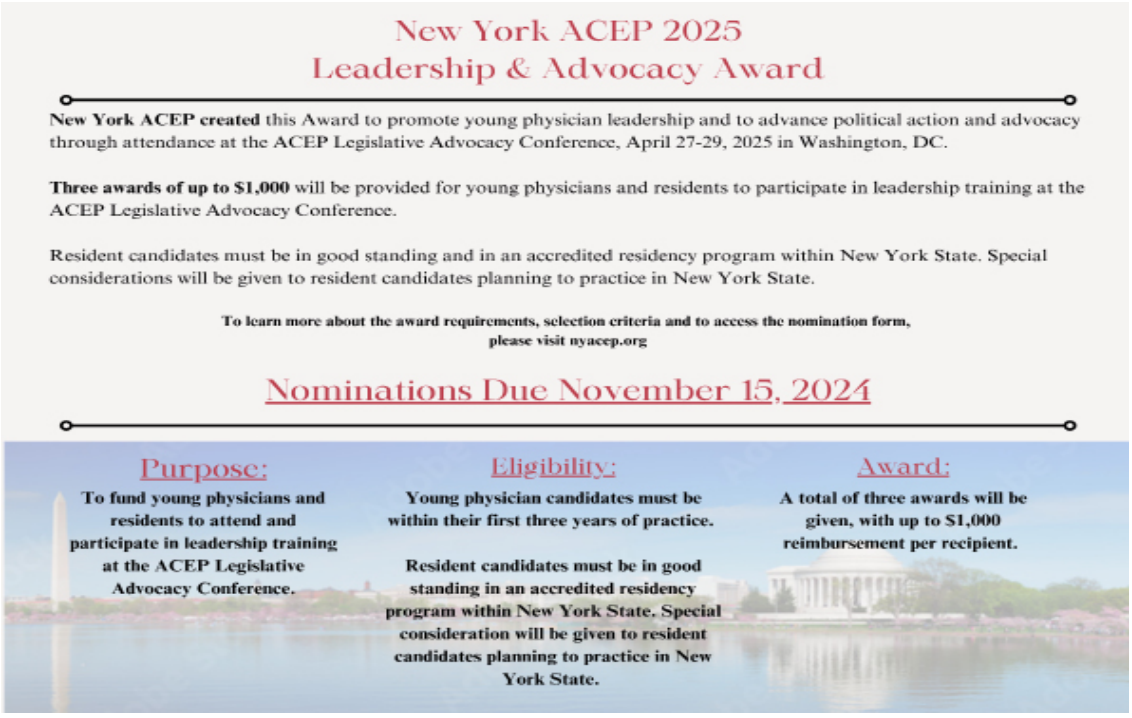
I was humbled and elated to be a recipient of the 2024 Young Physician & Resident Leadership and Advocacy Award. This provided me with the opportunity to attend the 2024 ACEP Leadership and Advocacy (LAC) Conference in Washington, D.C. this past April. I have served for six years as a member of the NYACEP Government Affairs Committee and previously served as the Health Policy and Advocacy coordinator for the New York Emergency Medicine Student Council and with the American College of Physicians as a NY Chapter Advocacy Intern in 2021 as a medical student. In these roles I have lobbied for years in New York State, but this is the first time I have had the opportunity to lobby in our nation's capital.

What struck me most about the entire conference was the recognition that there are far more physicians in congress than I assumed. There are 19 physicians in 2023 (second only to 2013 when there were 21). Emergency medicine is the best represented specialty with four emergency physicians elected to represent their constituents in Congress. Listening to Rep. Dr. Raul Ruiz (D-CA 35th), an emergency physician himself, I was reinvigorated. Emergency physicians see the entire spectrum of society with the greatest focus on the least advantaged and least represented individuals. We represent a touchstone within medicine for leadership and policy and to see and hear from physicians extending that to the halls of the Capitol building was inspiring.

Our focus this year, as in many previous, was on boarding, workplace violence, and Medicare reform. Advocating for specific bills as well as broad reform, we highlight the issues that face not just ourselves, but everyone in this country. Constituent advocacy enhances the message, putting a face to an issue and making it a harder problem to ignore. Meeting with our Senator's and my representative's staff was an opportunity to highlight the challenges we face in Syracuse. Inviting our lawmakers to visit our emergency departments (EDs) provides a vital chance to present a clear image of the struggles we face every day.

While the focus of LAC, is in large part, the Hill Lobby Day and the advocating for federal change, it also serves as a source of inspiration for pursuits at the state level. Listening to the approaches taken by the Indiana and Virginia chapters on Advanced Practice Provider (APP) scope of practice and the work of others on workplace violence sowed the seeds for further action in New York. The playbooks provided by other chapters inform the approaches we will take on issues going forward. Discussing the successes and failures of other chapters serves to strengthen all of our endeavors. Presentations on new streams of data allow us to, better than ever, show, rather than tell, the scope of the problem we face.

In light of current events there is a tendency towards apathy, leaning toward despondency (at least in my case) at the infighting in Congress. The seeming inability to come to consensus is... anxiety-producing to say the least. However, LAC reminded me (and I think everyone else) that there is more to it. By spending time amongst physician lobbyists, regulators and legislators, I was reminded of the complexity of the process and the need to advocate, vociferously, for ourselves and our patients.



PEDIATRICS

Maria Tama, MD
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From Sore Throats to Serious Threats: The Spectrum of Invasive Group A Strep in Kids

Introduction

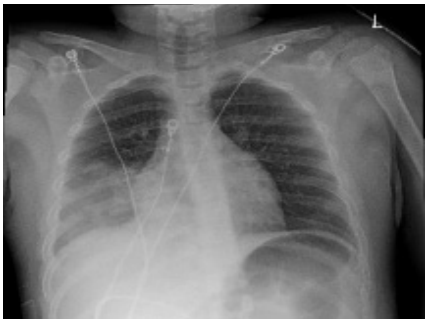
Invasive Group A Streptococcus (iGAS) infections, though relatively rare, pose a significant threat to pediatric patients, particularly those presenting to the emergency department (ED) with severe illness. The spectrum of iGAS disease can range from mild presentations, such as pharyngitis, to life-threatening conditions, including necrotizing fasciitis, streptococcal toxic shock syndrome and bacteremia. Despite advances in medical care, iGAS infections continue to be associated with high morbidity and mortality, underscoring the critical need for prompt recognition and treatment.

This case series aims to highlight our recent cluster of various clinical presentations, management and outcomes of children with invasive Group A Streptococcus infections encountered in our pediatric emergency department. By examining these cases, we seek to identify commonalities in clinical features that may aid in early diagnosis, discuss the therapeutic challenges faced by healthcare providers and emphasize the importance of a high index of suspicion in ill-appearing children. Understanding the nuances of iGAS infections in pediatric patients is vital for emergency physicians, as early intervention can significantly impact patient outcomes. We hope to contribute to the body of knowledge in recognizing and managing invasive Group A Streptococcus infection in the pediatric emergency setting.

Case 1

A 9-year-old male with a past medical history of asthma presented to the ED for evaluation of cough and shortness of breath for three days. Associated symptoms included fevers and decreased oral intake over the last day. Complete review of systems was otherwise negative. A few days prior to the ED visit, the patient was diagnosed with influenza and was prescribed Tamiflu but had not taken the medication.

Upon ED arrival, his vitals were HR 124, BP 84/49 Temp 98.2 F RR 30 SpO2 99% on RA. Physical exam revealed a thin, ill-appearing male who was tachypneic and in moderate respiratory distress. His skin was pale, with delayed capillary refill. The lung exam revealed coarse breath sounds on the right side, but no wheezing. Oxygen saturation was noted to be 90% on room air and the patient was placed on high flow nasal cannula oxygen (HFNC). Shortly after, he was given a bolus of fluids and albuterol with a dose of decadron. Initial VBG showed Ph of 7.15 Co2 of 41 with a lactate of 12.6. Complete blood count and metabolic panel were significant for neutropenia with a white blood cell (WBC) count of 1.00, hyponatremia (130), hypokalemia (3.0), bicarbonate of 13, acute kidney injury with a BUN/Cr of 17/1.5 and a viral swab was positive for influenza B. Chest x–ray showed a right lower lobe opacity and effusion, (shown below) and the patient was treated for pneumonia in the setting of influenza with ceftriaxone, azithromycin and oseltamivir.

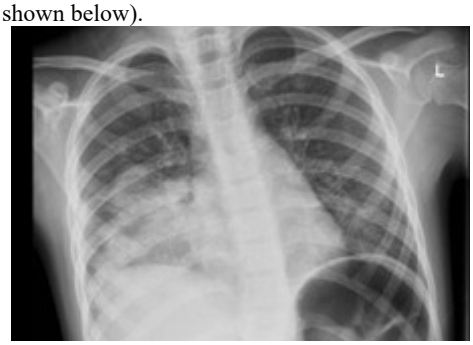


The patient was admitted to the Pediatric ICU where he had a rapid decline in clinical status requiring vasopressors and endotracheal intubation and subsequently went into cardiac arrest and expired within eight hours of ED arrival. His blood culture grew Group A Streptococcus by 14 hours.

Case 2

A 6-year-old female, born full-term without complications, up to date on her vaccinations and with no significant past medical history presented to the ED for evaluation of intermittent fevers for one week. Her symptoms were associated with upper respiratory symptoms. She developed right-sided chest and abdominal pain, associated with multiple episodes of non-bloody, non-bilious vomiting, prompting a visit to the ED.

Upon arrival at the ED, T98.9 F, HR 158, BP 88/56, RR 38, and O2 94% on RA. On examination, she was ill appearing and in moderate respiratory distress. Pertinent physical exam findings showed decreased breath sounds on the right and right lower quadrant abdominal tenderness to palpation. She was given acetaminophen, placed on 2 liters of oxygen via nasal cannula with improved oxygenation. Initial chest x-ray showed a right middle and lower lobe pneumonia (image shown below).



PEDIATRICS

Labs showed WBC count of 3 with 56% bands. Other notable labs were a metabolic acidosis with an elevated lactate of 5.6. She received a 20 cc/kg bolus of normal saline, was started on a 75 mg/kg dose of ceftriaxone and was admitted to the PICU.

Upon admission to the PICU, she was started on BiPAP 12/6 with FiO2 of 50%. Her blood culture grew Group A Streptococcus by 5 hours and 36 minutes. She had a complicated PICU course requiring vasopressors, intubation for chest tube placement for worsening pleural effusion, and prolonged antibiotic course. She was able to be weaned to room air after 9 days. The patient was discharged from the hospital on day 17.

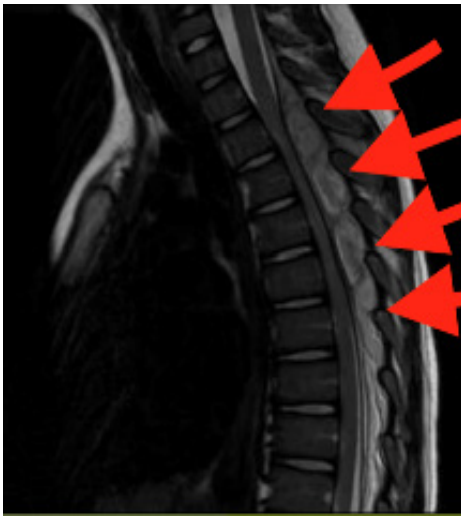
Case 3

An 8-year-old female with no significant medical history and up to date on her vaccinations, presented to the emergency department with complaints of back pain and inability to walk or urinate. Patient reported that she had back pain for four days, associated with fevers. On the night prior to ED arrival, she reported decreased sensation to her lower legs and difficulty ambulating. She also had not been able to urinate since the prior evening. She denied any dysuria or hematuria. She had no known trauma. Her mother was giving antipyretics to her at home.

In the ED, her vitals were Temp 98.7F, HR 136, BP 123/82, RR 24, and O2 99% on RA. Her physical exam showed a well appearing interactive female, lying flat on the stretcher. Pertinent exam findings included decreased sensation to her left leg compared to her right and diminished below the level of the knees. She was unable to raise her legs against gravity and had diminished lower extremity reflexes. There was no spinal tenderness on her back exam but pain with attempting to sit up in bed. Point of care ultrasonography showed 300cc of urine in her bladder. She had no skin changes and the remainder of her exam was normal.

Lab findings showed a WBC of 12 and a grossly normal complete metabolic panel. She had an ESR of 99 and CRP of 244. A foley was placed and urinalysis results were negative for infection.

She was sent for an emergent MRI of the brain and spinal cord which showed “extensive dorsal multiloculated collection, likely abscess, most pronounced from T1 through T6 with extensive phlegmonous enhancement of the remaining thoracic epidural space with cord compression.”



The patient had emergent laminectomy from T1-T6 for abscess drainage. The urine and blood cultures were negative but cultures from the epidural abscess grew Group A Streptococcus. She had a prolonged hospital course but was ambulating with assistance by post-operative day 2 and was discharged to a children’s rehabilitation facility. The patient was discharged from rehabilitation without any focal neurological deficits and is back to her baseline.

Discussion

Invasive Group A Streptococcus (iGAS) bacteremia in pediatric patients is a critical condition that necessitates prompt recognition and intervention by emergency medicine physicians. Ill-appearing children presenting with this infection often exhibit a spectrum of symptoms that can overlap with other less severe conditions, making early and accurate diagnosis challenging but essential for improving outcomes.

Children with iGAS bacteremia typically present with nonspecific symptoms such as fever, irritability, lethargy and poor feeding, which are common in many pediatric illnesses. However, certain clinical signs can raise suspicion for a more severe infection. These include a rapid progression of symptoms, severe pain, signs of septic shock or the presence of a preceding skin or soft tissue infection. Recognizing these red flags is crucial for emergency physicians, who must maintain a high index of suspicion for iGAS, especially in ill-appearing children.

Early recognition of iGAS bacteremia is paramount because delays in diagnosis and treatment can lead to severe complications such as septic shock, multi-organ failure and death. Empirical antibiotic therapy should be initiated promptly in children suspected of having invasive bacterial infections and blood cultures should be obtained to confirm the diagnosis and guide further treatment. The rapid initiation of appropriate antibiotics has been shown to significantly improve outcomes in children with iGAS bacteremia

Management of iGAS bacteremia involves not only antibiotic therapy, but also supportive care tailored to the severity of the child’s condition. This may include intravenous fluids, vasopressors for septic shock and intensive care monitoring. Emergency physicians play a pivotal role in the initial stabilization and coordination of care for these critically ill patients. Multidisciplinary collaboration with pediatric infectious disease specialists, intensivists and surgeons is often necessary, particularly in cases complicated by necrotizing fasciitis or other deep-seated infections.

For emergency medicine physicians, familiarity with the presentation and management of iGAS infections is essential for several reasons:

1. **Timely Diagnosis:** Quick and accurate diagnosis can significantly reduce the morbidity and mortality associated with iGAS infections.
2. **Appropriate Use of Resources:** Early identification and treatment can help in the appropriate allocation of resources, such as intensive care beds and surgical interventions.
3. **Education and Awareness:** Increasing awareness and education among emergency medical staff about the signs and symptoms of severe iGAS infections can improve patient outcomes and reduce the risk of misdiagnosis.

The recognition and management of ill-appearing pediatric patients with iGAS bacteremia are critical competencies for emergency medicine physicians. By maintaining a high index of suspicion, initiating timely and appropriate treatment and collaborating with multidisciplinary teams, emergency physicians can significantly improve outcomes for these vulnerable patients. This case series underscores the importance of vigilance and expertise in the emergency department setting to effectively combat the serious threat posed by invasive Group A Streptococcus infections.

PEDIATRICS

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Calendar

September 2024

6	Board of Directors Meeting, Sagamore 1:00p
11	Education Committee Conference Call, 2:45 pm
11	Professional Development Conference Call, 3:30 pm
12	Practice Management Conference Call, 1:00 pm
18	Government Affairs Conference Call, 11:00 am
18	Emergency Medicine Resident Committee Conference Call, 2:00 pm
18	Research Committee Conference Call, 3:00 pm
19	EMS Committee Conference Call, 2:30 pm
28-29	ACEP Council Meeting, Las Vegas, NV
30	New York ACEP Member Reception, Mandalay Bay Resort, 5-6pm

October 2024

9	Education Committee Conference Call, 2:45 pm
9	Professional Development Conference Call, 3:30 pm
10	Practice Management Conference Call, 1:00 pm
16	Government Affairs Conference Call, 11:00 am
16	Emergency Medicine Resident Committee Conference Call, 2:00 pm
16	Research Committee Conference Call, 3:00 pm

November 2024

13	Resident Research Conference, 8am-12pm
13	Education Committee Conference Call, 2:45 pm
13	Professional Development Conference Call, 3:30 pm
14	Practice Management Conference Call, 1:00 pm
20	Government Affairs Conference Call, 11:00 am
20	Emergency Medicine Resident Committee Conference Call, 2:00 pm
20	Research Committee Conference Call, 3:00 pm

New York EM Residency Spotlight

Arnot Ogden Medical Center

Demographics

Program Director: Dylan Kellogg, MD, MSMEd

Program Coordinator: Sandy Majors

Program Coordinator E-mail Address: raesandra.majors@arnothealth.org

Hospital Capabilities: STEMI, Stroke

Total Number of EM Residents: 18

Residents Train Each Year: 6

Inagural Resident Class Year: 2015

Benefits Offered: ROSH Review, Membership Dues Coverage, Lab Coat(s), Dental Insurance, Health Insurance, Professional Liability Coverage

Website Link: www.arnothealthgme.org/emergency-medicine

Instagram: @arnotemres

Most Unique Program Feature: We are a small community program focused on training residents to work in rural, underserved communities.

What is your favorite aspect of the program? We have an incredible group of residents and attendings. This is a small enough program that you get to know everyone extremely well.

What is your program known for? Small, close-knit program, wilderness medicine didactics, mentorship.

What are you most proud of with your program? You get great exposure to the breadth of community EM. You have a high level of ownership of your patients (not competing with outside trainees for procedures). You'll leave here ready to work anywhere.

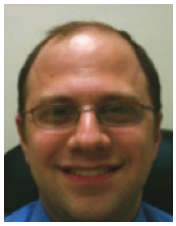
Just $25 per month, you'll get:

ACEP National Dues	**$923** value
ACEP Chapter Dues	varies - average **$620** value
PEERPrep Board Certification Prep Course	**$379** value
FACEP Application Fee	**$200** value
Free Section Membership	**$120** value
New Attending Kits	**$60** value

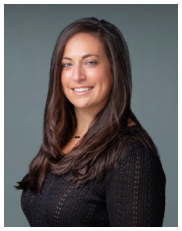
*2024 residency graduates are eligible to renew into ACEP's New Attending Membership Bundle. This sale is available through September and guaranteed for these years.

Renew Today

PROFESSIONAL DEVELOPMENT



Moshe Weizberg, MD FACEP
Medical Director, Emergency Department
Maimonides Midwood Community Hospital
Chair, New York ACEP Professional Development Committee



Christine DeSanno, DO FACEP
Medical Director, Long Island Community Hospital
Associate Professor of Emergency Medicine
NYU Grossman Long Island School of Medicine

Completing residency is an exciting milestone. Your first few months as an attending is like taking the training wheels off your bicycle. Your training program begins to feel like a distant memory as you navigate your first shifts. We've all been there. But after your first few months, perhaps even years, you enter a routine and shifts in the emergency department become autopilot.

This was my experience after residency. I thought I was set, working my clinical shifts, going home and living the life I had dreamed of since entering medical school all those years before. However, I felt stagnant and lost. I struggled to envision my future goals. There was no longer a senior resident to consult or a program director to guide me. What I was lacking was a mentor.

Why aren't mentorship resources more formalized in the medical field? In medical schools and residency programs there has been a shift towards incorporating mentorship in various capacities whether peer-to-peer, small group or advisory. However, post-residency many enter their careers and are left to fend for themselves.

Let's discuss the top reasons having a mentor could benefit both your career and life:

1. **Guidance and advice**: A mentor is someone you respect whether for their journey alone or the knowledge they've built along the way. They have experienced things you may be interested in and provide insight into your future goals.

2. **Skill development**: Mentors have the capability of working through specific skills related to your specialty. If that is a clinical skill or social skill, your mentor may have a unique perspective that helps you improve.

3. **Academic and research guidance**: This can be a niche interest in medicine. The divide between those interested in research and those who would rather retire before writing a single word is usually quite apparent. But there is also a subset of people who just need a little help getting started.

4. **Networking**: This may sound dreadful for most, but it is often necessary for career growth and fostering relationships. If attending dinners, events or conferences gives you extreme anxiety, you may benefit from someone who has tips and tricks on how to cope and move past it.

5. **Building confidence**: This best summarizes many of the above points. The more confident you feel in achieving even the smallest goal, the more room there is for another. The growth may even become addicting. Our psyche often causes us to feel stagnant. Overcoming this may open doors to opportunities you didn't know existed.

6. **Establishing a long-term relationship**: What if this mentor-mentee relationship lasts more than the time it takes to achieve your goals? You find a colleague for your entire career and perhaps even a friend.

In my own experience, I accidentally stumbled upon those whom I considered mentors and that's sometimes how it goes. Do I wish I found them sooner in my career? No doubt about it. Have I achieved more because of them? Absolutely. I am grateful for their availability, honest opinions and wealth of knowledge. My mentors from 5 years ago, now, and in the future, do not and likely will not be the same person. I am not limited to having only one mentor. I hope to take what I have learned from my first few mentors and apply it toward my journey seeking new connections.

I hope sharing my experiences has been helpful. If you would like help connecting with a mentor, New York ACEP offers valuable mentorship resources. Whether you are interested in finding a mentor or becoming one, please visit our nyacep.org to learn more.

Nuvance Health Sports Medicine Fellowship Program

ACGME Program ID:1273512001
Number of Fellow Positions: 2 per year
1-Year Training Program

Alexander Chasin, MD

MEET YOUR PROGRAM DIRECTOR
Alexander Chasin, M.D.

Dr. Chasin was born and raised locally in Kingston, NY. He received his undergraduate degree from The Pennsylvania State University, medical degree from St. George's University School of Medicine and went on to complete his residency in Emergency Medicine at Brookdale University Hospital and Medical Center and a Sports Medicine Fellowship at Northwell North Shore University Hospital. Dr. Chasin is the current Medical Director for the Professional Women's Hockey League (PWHL) NY team with previous experience as the team physician for Freeport High School, assistant team physician for St. Francis College and a physician consultant for the New York Islanders. In his free time he enjoys skiing, watching PENN STATE FOOTBALL (WE ARE!) and spending time with his cocker spaniel, Chaplin.

PROGRAM WEBSITE

INSTAGRAM

@vassarsportsmedfellows

PROGRAM HIGHLIGHTS:

- Primary training site is located at Vassar Brothers Medical Center, in New York's beautiful Hudson Valley
- Program rotations in:
  - Point of Care Ultrasound
  - Physical and Occupational Therapy
  - Outpatient Rotations in Knee, Shoulder, Spine, Joint, Ankle and Podiatry
  - Sports Nutrition
  - Athletic Performance
  - Research
  - Exercise Cardiology
  - Pain Management
  - Trauma
  - Sports Neurology/Headache
  - Electives- Mt. Snow (VT) ski clinic, Boca Raton- (FL) Orthobiologic clinic
- Longitudinal Experiences:
  - Primary Specialty Clinic
  - Sports Medicine Clinic
  - Sporting Events - Vassar College, Pace University, Mount Saint Mary College
  - Pathfinder FC - Soccer
  - Kingston Stockade FC – Soccer
  - Mass Participation Event- SOS Triathlon, NYRR NYC Marathon
  - Hudson Valley Renegades (NY Yankees Minor League Affiliates)
  - Professional Women's Hockey League (NY Team)
- Protected educational time within our weekly Academic half-day
- Monthly Journal Club series
- Scholarly Activity and Quality Improvement Projects
- Comprehensive and Competitive Stipend and Benefits

APPLY SOON!

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Aleksandr.Turchin@Nuvancehealth.org