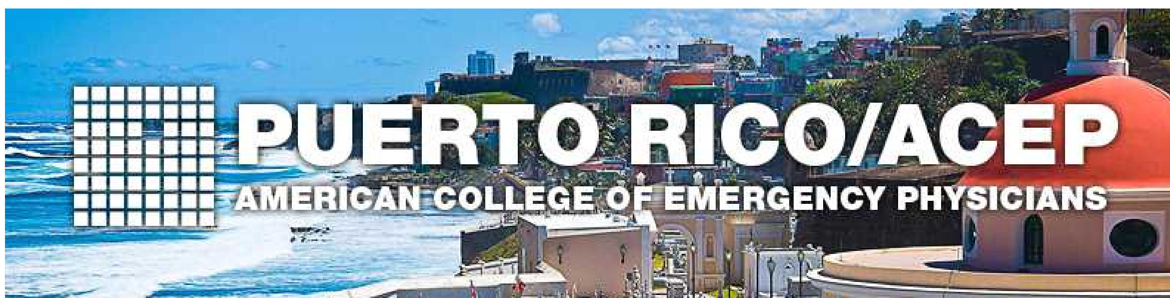
A Newsletter for the Members of the Puerto Rico Chapter - Fall 2021
View Web Version



En esta Edición

Del Presidente del Capítulo de Puerto Rico ACEP
2022 Caribbean Congress
Noticias Resident Corner
Noticias Medical Student Corner
Noticias Social Media
¡Felicidades: Nuevos Fellows!
¡Bienvenidos: Nuevos Miembros!
Noticias de ACEP Nacional

Mensaje del Presidente

Living in Interesting Times
I keep thinking of the phrase: "May you live in interesting times". Although its origins are controversial, there is something fascinating about the fact that it is said to be a curse instead of a good-hearted blessing. It feels appropriate to consider we are living in these times indeed.

To say we have been living in trying times would be the understatement of the year or decade which started out with a worldwide pandemic the likes of which we had never seen. We have seen challenges to our specialty coming from various sources: from our misinformed patients, corporate America, loss of faith in our institutions, and even other medical professions. In Mainland US there are discussions being had about the future of Emergency Medicine and the role we will play in it. Locally, we have our own challenges. At PRACEP, we continue to focus on the growth of our specialty and its recognition as we have for years. In the next few lines, I take the opportunity to give you all an idea of all that has been happening within our chapter and a look at things to come.

Project 796
Puerto Rican House of Representatives Project 796 was aimed at modifying an existing law that states that to be a state EMS medical director or medical control, physicians should be board certified in emergency medicine. Many general practitioners who work with private ambulance companies and in prehospital

transport supervision were co-sponsoring this change. We met with representatives and submitted our recommendations. Presently, we are waiting for the final decision if the law is to be changed or not or whether we are to meet with another senate representative in the near future.

Puerto Rico College of Physicians and Surgeons Senate
The "Reglamento 9184" went into effect mid last year. This list of by-laws provides a framework on how hospitals operate and changes many of the regulations from prior installments. For instance, this new version states that a General Practitioner (without an EM specialty) may perform the duties of a medical director supervising adult emergency departments. In terms of pediatric emergency departments, it states that pediatricians may fill this position with no mention of emergency physicians or even pediatric emergency physicians as potential candidates.
During the last Senate meeting we submitted a proposal to request the creation of a committee composed of members in specialties affected by these new by-laws. This committee would oversee providing recommendations for future renditions. We should note that no such feedback was requested or provided by PRACEP or the "Colegio de Médicos de PR" for the recent revisions.

Meeting at PRMC
There have been many situations regarding transfer of patients to the PR Medical Center in recent months. At the request of our members, we met with the administration to discuss potential interventions to improve the communication and care for our patients. More will be informed later.

It has been my privilege to organize the efforts of this amazing group of individuals at the Colegio de Emergenciologos de PR/PR Chapter of ACEP in many prior opportunities. I aim to continue to do so for as long as I can. But I would be remiss to tell you that this is all about you. You need to let us know through email, phone call, text what concerns you and how we can help. Our proverbial door is always open, and our lines are at your disposal all the time to hear your concerns. We can be as active and as loud as we want. It is only a matter of how we get involved.

This is your tribe; this is your group. We share our passion for our work but also our hardships. This group of exceptional physicians makes me proud and gives me hope. We can be as strong as we choose to be. And we should continue to focus our concerns and work together with one goal in mind: improving the emergency care for all our patients. Especially during these interesting times.

Save the Date
Our annual convention is back! We will be able to meet once again. It will be held on May 12-14 at La Concha. Our Chapter Annual Meeting is May 12th, during the evening. Hope to see you all there!

Noticias **Resident Corner**

Cpt. Alexis A. Diaz, MD-MBA

Pgy-2 Emergency Medicine Resident at University of Puerto Rico

Improving Pain Management in the ED
76 y/o female comes to the Emergency room with a severe hip pain after a fall. X-ray shows a femoral neck fracture. Patient is given opioids for pain management, namely morphine 0.1 mg/kg/dose was used. Despite the administration of the pain medication, the patient was still complaining of moderate to severe pain. A second dose was considered, but the patient had borderline low blood pressures. At this moment we are presented with a question: Do we have any other options to control the pain without hemodynamically compromising our patients? The answer could be a femoral nerve block.

US Guided Femoral Nerve Block
The Femoral nerve is a mixed nerve with motor fibers that innervate the anterior aspect of the thigh and has sensory fibers at the internal-anterior region of the inferior extremities including the articulations of the internal knee. This nerve block can be used for femur fractures, tibia fractures and anterior/posterior ligament tears of the knee. This method has been shown to be effective and has less side effects and complications than conventional medications.

Tools that you need to perform this nerve block
1) Ultrasound machine of high frequency with linear probe
2) Sterile probe cover
3) Sterile Ultrasound gel
4) Sterile Gloves
5) Local anesthetic (preferable 20-25 ml of bupivacaine 0.25%)
6) 20 ml sterile syringe
7) 21- and 25-gauge needle
8) Antiseptic solution for the cleaning of the skin

How to perform femoral nerve block

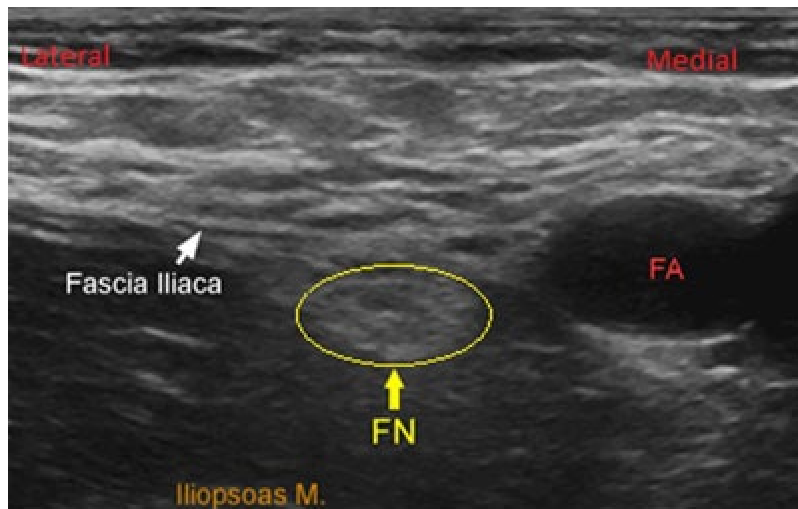
- Position yourself on the right side of the patient, with the US machine in front of you to have better visualization of the screen. Place the affected leg in neutral position with the foot perpendicular to the support surface.
- Place the linear probe at the inguinal region. You will see a pulsating structure which is the femoral artery and laterally there will be a hyperechoic structure of oval/triangular shape which is going under the iliac fascia which is the Femoral Nerve.
- Move the linear probe inferiorly around 10-15 º degree, for a better visualization of those structures.
- Use the 25 G needle to place lidocaine at the inguinal region of the skin where you will introduce the anesthesia. Remove the 25 G and prepare the bupivacaine in the 21G needle.
- Introduce the (21G) needle to the inferior aspect of the hyperechoic structure which is the femoral nerve sheath. The nerve will rise with the entry of anesthesia, afterwards use the rest of the anesthetic on the superior aspect of the femoral nerve sheath.
- Once anesthesia nerve block is provided, remove needle.

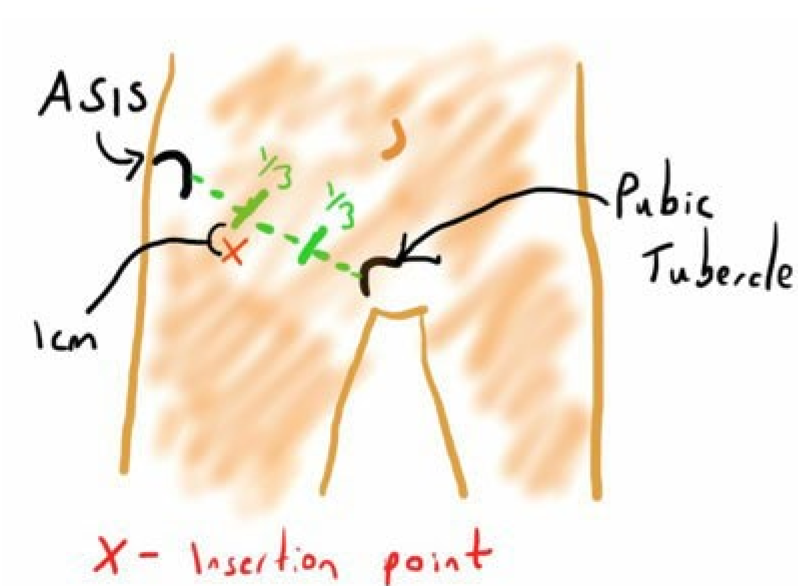
In an average adult, a total of 10-20 ml of bupivacaine is more than enough to alleviate pain. When you inject the nerve, you will have better visualizing of the nerve because it will rise up from the iliopsoas muscle. The patient should report an improvement of pain or even be completely pain free around 10 to 20 minutes post procedure. This procedure is proven to be effective, convenient and may last up to 8hrs. Offering optimal multimodal pain control for acute is a core responsibility of the practicing emergency physician. The ultrasound-guided femoral nerve block is an ideal option. For these reasons, femoral nerve blocks, should be considered more often from ED standpoint.

Commentaries

There is valid argument which justifies the use of femoral block in emergency rooms as it provides fewer side effects than opioids. A study published by "Academic Emergency Medicine" in 2013 evaluated the use of the femoral block in emergency rooms as an adjunct to opioids. Adults with moderate and severe pain randomly received intravenous morphine as well as the 3-in-1 femoral block with bupivacaine using ultrasound and the others used intravenous morphine with 0.9% saline showed that the group using bupivacaine demonstrated a decrease in blood pressure. With the use of bupivacaine, pain was decreased drastically lesser usage of opioids was used in the Emergency Department.

Research shows that after a few sessions with the procedure, residents can become experts. This treatment is not only cost-effective, but provides fewer complications and side effects, and is ideal for patients who have moderate to severe persistent pain and or low cardiac pressures. Next time an elderly patient arrives to your ED with similar complaint, this procedure could make the difference.





Noticias Medical Student Corner

Useful "Off-Service" Rotations for MS3/MS4s who wish to pursue an Emergency Medicine Residency

Zilmarie Díaz Pacheco (MS4 UPR-RCM)
José Daniel Hernández (MS4 UPR RCM)
Luis Emilio Miranda Rivera (MS4 UCC)

When asked "Why Emergency Medicine?" during residency interviews, aspiring candidates will probably mention the variety of pathologies, the diverse patient population, and the different procedures done in the Emergency Department. As MS4s, we get to design our schedule based on our areas of interest and choose electives that will strengthen our clinical knowledge. In our opinion, future Emergency Medicine doctors' benefit from every clinical opportunity, starting from the third-year core rotations. As MS4s, we find that electives such as Radiology, Anesthesia, and Trauma are also opportunities to develop skills that are of immense value in the ED.

As an MS3 in Puerto Rico, most medical schools have core rotations in Internal Medicine, Ob/Gyn, Surgery, Psychiatry, and Pediatrics. These are core rotations for a reason, and none is least important when it comes to the patients, we will treat in the ED. Internal Medicine wards and clinics help us apply and solidify the knowledge learned in the pre-clinical years. From an Emergency Medicine standpoint, it also leads us to appreciate the management of our patients after they are discharged or admitted. The same could be said for our pediatric population and the Pediatrics rotation. Ob/Gyn emergencies are not rare in our EDs Learning to diagnose these pathologies and redirect patients to the appropriate level of care is crucial in the management of Ob/Gyn emergencies. When it comes to Psychiatry, while rotating in our home institution, we have encountered a large volume of psychiatric patients that come in for psychiatric complaints, as well as for medical ones. Regarding the Surgery rotation, it also provides us with basic knowledge of procedures and surgical management of various medical emergencies.

The following are three MS4 electives that we find are useful for aspiring EM residents: Anesthesiology, Trauma, and Radiology.

Anesthesiology - As you may have guessed, EM encompasses something of every other specialty and anesthesiology is no exception. In general terms, its goals are securing the patient's airway and assessing the patient's stability after the administration of anesthetics. Patients mostly receive care from this field when they opt in for elective surgeries that warrant careful sedation, but this is not always the case. Patients who are critically ill in need of respiratory support require some type of intervention to secure the airway and prevent respiratory collapse, which is the most preventable form of death in critically ill patients. When patients like these arrive at the ED, what is our first screening survey? The ABCs! Therefore, the first objective for emergency physicians is to make sure the patient can breathe on their own. If not, then intubation is warranted. Sometimes, the patient is so critically ill that rapid sequence intubation is performed under a very "harmoniously chaotic" setting, as one emergency resident described it last year. This setting can be incredibly stressful, but emergency physicians are trained to maintain their composure and work synchronously with the staff to perform the procedure in an effective and organized manner. Anesthetic administered, ready for intubation! I see the vocal cords, introducing the tube now! Chest expansion visualized, tube confirmed to be in appropriate position, connecting to machine now! Patient is stable. Another day at the Emergency Department. **- Jose D Hernandez Flores MS4**

Trauma - For me, one of the most decisive factors for choosing Emergency Medicine as a specialty was the opportunity of serving inside a trauma setting. Nevertheless, as a medical student, it can be intimidating not knowing how to be an asset in such situations. Therefore, it is essential to first understand Trauma Resuscitation principles and how to help inside the Trauma Bay. Regarding Trauma Resuscitation, the first step is to obtain a history, which is provided ahead of time by EMS for the most part. The next step, which for the most part is the "bread and butter" of EM, is to properly prepare for the incoming patient. This includes, but is not limited to, assigning the team leader and roles, drawing up medication (especially for intubation and ACLS), organizing cardiac monitor materials and procedural supplies. After the patient arrives and EMS history is obtained, it's time to perform the Primary Survey. In this brief physical exam, immediate life threats are assessed and treated in a stepwise manner, utilizing the ABCDEs mnemonics and treating any abnormalities before moving to the following letter. The next part of a patient trauma evaluation is the Second Survey. A head-to-toe, more thorough physical examination which students learn in their first two medical school years.

As one can see, to be successful inside Trauma Bay is imperative to follow a strict protocol to maximize the patient's chances to survive. However, for medical students, as mentioned above, this can be an intimidating environment. Therefore, as a student, it is essential to realize that the chances of an emergency walking through the door and requiring the trauma bay are high. Thus, one first needs to calm down and understand your limitations. In other words, you are there to observe and learn. In addition, pay attention to the importance of preparation and how a calm and controlled environment promotes excellent closed-loop communication between physicians, nurses, and technicians, providing better care for the patient. Finally, suppose you want to be an active member of the trauma bay team. Ways to help range from helping expose the patient from their clothing with medical shears, having the ultrasound nearby, connecting the patient to the cardiac monitor, and helping with chest compressions if needed.

In conclusion, life in the trauma bay presents uncalled scenarios that can be stressful and catastrophic. For this, it is crucial to be calm and prepared at any moment. As a medical student, know your surroundings, know how you can help and your limitations, observe and learn, and again ... being prepared is the name of the game. **- Luis E. Miranda Rivera, MS4**

Radiology - Radiology might not be the first elective that comes to mind when thinking about useful rotations for EM. It is certainly not as fast paced as EM, there are fewer interactions with patients, and the workspace is quieter (and way darker). As MS4's pursuing EM, a Radiology elective is useful to familiarize ourselves with different modalities of imaging and normal and abnormal findings. In many institutions, EM residents and attending physicians look at radiologic studies for preliminary findings before the official reports are submitted. This leads to early and more effective management of medical emergencies. I had always struggled with reading and interpreting radiologic studies, so I knew that this elective would be beneficial. During my rotation, I learned to systematically look at images and the importance of the clinical picture in the interpretation. I also learned to appreciate the importance of collaboration between ED physicians and radiologists. In the end, it is all about teamwork and radiologists, as well as all other consultants, are our best allies in caring for our patients. I also used this rotation to further familiarize myself with performing and interpreting ultrasound studies. I would see patients with the sonography technician and then interpret the images with the attendings. I am certain that this experience will come in handy while performing POCUS in the ED. Although the environment in a dark radiology reading room is much different from that of the ED, there is a lot to learn from radiologists and an elective in this specialty will for sure be a learning experience for any MS4. **- Zilmarie Díaz Pacheco, MS4**

Noticias Social Media
Pablo D. Vega-Parra, MD

There are many ways to get involved with helping the Puerto Rico ACEP community, but so little time! Why not share with us just one of the things you have found online that have helped you in your practice or outside work? It could be a meme, a video, a song or anything else you believe could benefit us all. Whether you made it yourself or you found it elsewhere, we want to showcase the things you like. Tag our Instagram page @pr.acep or send it as a direct message, and we will share it from our account and tag you in it! We are excited about the things we can do together with you as a part of ACEP.

¡Felicidades: Nuevos Fellows!

Victor Manuel Aquino Jose, MD, FACEP
Rosalie Barrios, MD, FACEP
Juan C Zequeira Diaz, MD, FACEP

¡Vea el video de reconocimiento aqui!

¡Bienvenidos: Nuevos Miembros!

Una bienvenida especial a los nuevos miembros del Capítulo de Puerto Rico ACEP.

Cheysaliz Marie Perez Verdejo
Fabiola Nicole Gonzalez Diaz
Harry Gabriel Nazario Diaz

Kevin Omar Laureano-Cruz
Natalie Rosalina Weiner
Paola Cordero-Colon

Haydee M.Rincon	Roberto C.Marrero-Zeda
Hector Daniel Barreto	Stephen Giovanny Garzon
Julieva Rios-Mercado, MD	Stephen E. Uriarte Rodriguez
Julissa N. Nicole Jaca Castro	Yonelie Gonzalez Torres

Quizás se pregunte si debería involucrarse con Puerto Rico ACEP o EMRA o a nivel nacional. ¡Te animamos a hacerlo!

FROM NATIONAL ACEP

Featured News

"We cannot solve the challenges of our time unless we solve them together"
In her address to the ACEP Council on Oct. 24, 2021, ACEP President Dr. Gillian Schmitz outlined her vision and approach as the College's new leader. Watch her speech.

EM Physician Workforce of the Future:
- Emergency Physicians Explore the Future of the Emergency Medicine Workforce (ACEP *Now*, 10/25/21)
- 2021 Survey of the Emergency Medicine Job Market (ACEP *Now*, 10/18/21)
- Get the latest workforce updates at www.acep.org/workforce.
- Visit ACEP's Career Center

Regulatory News:
- Status Update: ACEP Actions to Push Back Against Flawed No Surprises Act Regulation (11/18/21)
- Breaking down the Biden Administration's new vaccine mandates: How do they impact you? (11/11/21)
- Emergency Physicians Call on Biden Administration to Amend Interim Final Rule on Surprise Billing (11/9/21)
- The 2022 Physician Fee Schedule Final Reg: Highlights and Perspective (11/4/21)

EM Physicians Join Forces to Create Award-Winning COVID-19 Field Guide
In this video, ACEP members tell the origin story of the award-winning **COVID-19 Field Guide,** a valuable resource that has been utilized by emergency clinicians in more than 160 countries.

Rescue Team Doctor at the Surfside Condo Collapse Shares Experience
In this ACEP *Now* article, Dr. Benjamin Abo gives a firsthand account of what it was like for the urban search and rescue teams that responded to the Surfside condo collapse. (Plus, get bonus content from Dr. Abo on this month's *ACEP Nowcast*.)

ACEP Member Benefits

A Checklist to Help You Negotiate The Best Employment Contract
Employment contracts are complex and often difficult to navigate. This checklist is designed to help you consider all the right questions when reviewing any employment contract you receive.

Legal and Financial Support Services
For just $15 per year, ACEP members can access Mines & Associates' legal and financial support assistance. This service includes unlimited 30-minute in-person consultation for each individual legal matter, unlimited telephonic 30-minute consultation per financial matter, and 25% discount on select legal and financial services all with MINES network legal and financial professionals.

For more employment contract & job hunt resources, visit ACEP's Career Center

Upcoming ACEP Events and Deadlines

Dec. 4: Last day to submit your videos for the TikDoc Challenge
Dec. 16: Alleviating the Pain: Managing Sickle Cell Patients
Jan. 17-19: Reimbursement & Coding Conference
Jan. 18: Advanced EM Ultrasonography Exam Review Course

Puerto Rico ACEP Chapter
Fernando L. Soto, MD, FACEP - President
Adriana Alvarez - Chapter Executive Director
800.798.1822 Ext. 3312 | Website
c/o National ACEP
4950 West Royal Lane
Irving, Texas 75063-2524
© 2021 Puerto RIco Chapter ACEP. All rights reserved.
Getting too many emails? Update your ACEP Email Subscription Center and select only what you want to receive.