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Poster Presentations

More than just Leg Pain: A Rare Presentation of Stanford Type A (Debakey Type I) Aortic Dissection

P01

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Disclosure	No relevant financial relationships to declare
Title	**More than just Leg Pain: A Rare Presentation of Stanford Type A (Debakey Type I) Aortic Dissection**
Abstract	Introduction Aortic dissection is an acute life threatening medical emergency that requires rapid diagnosis and intervention, which often proves challenging due to its diverse array of clinical presentations. Prompt recognition and appropriate intervention is crucial. Clinical signs and symptoms are diverse with an estimated 38% of cases being missed on initial evaluation. However, not all aortic dissections present with classic symptoms of abrupt chest, back, or abdominal pain and the diagnosis may be missed. Aortic dissections are defined by either the Stanford (Type A or B) or the DeBakey (Types I, II or III) classification systems. Lower extremity pain without chest, abdominal or back pain is an unusual, rarely documented initial presentation of a DeBakey Type I Stanford Type A acute aortic dissection. Case presentation 46 y/o male with medical history of HTN, ESRD S/P renal transplant in 2015 presented to ER with right lower extremity pain. Patient reported a “pop” sound with 10/10 intensity of pain and his limb turning cold associated with loss of sensation. On physical exam pulses were weak with Doppler. Hip X ray was negative for fractures or dislocation. CTA lower extremity showed no flow in the distal aorta, right common iliac artery, right external iliac artery with concern for inflow occlusion and acute lower limb ischemia. Final Diagnosis Imaging with CT Angiography of Chest and Abdomen revealed a Stanford type A/DeBakey type 1 aortic dissection. Management CTS and Vascular surgery was consulted. He underwent repair of aortic dissection with graft and Fasciotomy of right lower extremity .Post operatively patient was monitored in ICU and was successfully managed with multiple blood transfusions for Acute blood loss anemia, intubation followed by extubation for Acute respiratory failure, Acute Kidney Injury with Hemodialysis,

	amiodarone drip for AFIB RVR. Echo showed EF 58% with no new abnormal findings. Chest tubes were removed and all pulses were intact distally. Patient was discharged to Rehab on Coumadin with daily INR checks, Amiodarone and dialysis on every alternate day. Acute aortic dissection is associated with significant morbidity and mortality, often from complications including aortic regurgitation, cardiac tamponade and myocardial infarction. The management of type B dissection is predominantly blood pressure control but Stanford type A dissection requires urgent surgical intervention. After 24 days, patient was discharged from hospital, showing no neurological or vascular deficit
Learning Objectives	Our case adds to the literature the importance of atypical presentations of acute aortic dissection . Despite continued surgical advancement, overall in-hospital mortality remains significantly high (27.4%). This Uncommon presentation warrants to be considered in the differential when encountering patients with Lower limb ischemia without chest pain and with normal blood pressure. For successful treatment of acute aortic dissection type Stanford A complicated with limb ischemia, rapid and accurate diagnosis is essential, together with close collaboration between Emergency Physicians, cardiothoracic and vascular surgeons is necessary for early, successful operative intervention.

Myoclonic Status Epilepticus as An Initial Presentation of Acute Biliary Pancreatitis

P02

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Myoclonic Status Epilepticus as An Initial Presentation of Acute Biliary Pancreatitis**
Abstract	Introduction: Acute pancreatitis is a diffuse inflammatory condition with both gastrointestinal and extra-gastrointestinal complications. Neurological complications of acute pancreatitis include pancreatic encephalopathy, intracerebral hemorrhage, retinopathy (Purtscher's syndrome), ischemic optic neuropathy, axonal neuropathy and seizures [1, 2]. Acute symptomatic seizures have been reported in acute pancreatitis patients in the setting of hypocalcemia, hypercalcemia and acute pancreatitis secondary to heavy alcohol use [3-5]. Early recognition and prompt treatment of seizures is crucial in preventing permanent damage to the brain and other serious complications. Here we report a patient who presented with myoclonic status epilepticus as an initial presentation of acute pancreatitis in the absence of other provoking factors. Case report: A 78-year-old African-American male with past medical history of stage (I) chronic kidney disease secondary to diabetic nephropathy presented to an out-side hospital with a new onset right-sided face and bilateral hand twitching movements. Patient has no history of epilepsy or prior seizures. He denied recent alcohol consumption or medication overdosing. His initial neurological examination exhibited intact mental status, language and cognition with no apparent cranial nerve abnormalities, but was notable for continuous right facial twitching as well as bilateral upper extremities myoclonic jerks. Simultaneously, patient was found to have epigastric tenderness and guarding on clinical exam. Initial laboratory work up revealed normal serum glucose and electrolytes panel with mild elevation in liver enzymes levels. Lipase level was significantly elevated more than 60 times of the upper normal

	limit. Abdominal Computed Tomography (CT) scan showed signs of acute inflammation surrounding the pancreas. CT imaging of the head was unremarkable. Patient received a dose of 2 mg IV lorazepam followed by IV load of 2 g levetiracetam, and then he was transferred to our university hospital for further management. Upon arrival, patient was afebrile, hemodynamically stable but was still having clinical myoclonic movements of the face and bilateral upper extremities. He was monitored with continuous video-EEG which showed rhythmic and repetitive spike-wave discharges consistent with myoclonic status epilepticus (Figure 1). MRI of the brain was also unremarkable. Patient became seizure free after adjusting levetiracetam dose with no clinical seizures or electrographic seizures on EEG for more than 48 hours. Subsequently, patient was transferred to medicine service to continue treatment of his other medical problems including acute biliary pancreatitis and acute respiratory distress. Conclusion: The treatment of acute symptomatic seizures includes treating the underlying cause. However, in some instances, short-term anti-seizure medications may be needed in order to suppress the seizures until the underlying cause can be appropriately treated. Further studies are required in the future to investigate the pathophysiology of seizures in the setting of acute pancreatitis and weather pancreatic enzymes panel should be considered in patients presenting with new-onset seizures with no known etiology.
Learning Objectives	• Acute pancreatitis can be complicated by new-onset seizures • Seizures can complicate acute pancreatitis management • Early recognition and treatment of seizures is important • Short-term anti-seizure medications may be needed to suppress the seizures

Door In Door Out and Transportation Times in Two Telestroke Networks

P03

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Title	**Door In Door Out and Transportation Times in Two Telestroke Networks**
Abstract	Purpose: To assess door in to door out (DIDO) time at spoke sites, and transportation time between spoke sites and thrombectomy-capable stroke center (TSC) in two large, rural telestroke networks. Methods: The prospectively maintained data on all patients treated with intravenous tissue plasminogen activator (tPA) through two telestroke networks between March 2017 and December 2017 was reviewed. Mann-Whitney test was used to compare median times between different groups. Generalized linear regression model was used to predict total time of care controlling for transportation distance in patients who received thrombectomy. Results:

	Total of 85 patients were included in this study. Median NIH stroke scale on presentation was 13 (IQR 7 - 17), median DTN time was 49 minutes (IQR 40- 62), and median DIDO was 111 minutes (IQR 92 - 157). Eighteen patients (21%) underwent CT angiography (CTA) at spoke prior to transportation. Median DIDO for patients was 169 minutes for patients who received CTA before transfer, compared with 107 (minutes for patients who did not (P=0.0004). The median duration of tPA to door out was 101.5 (IQR 63 -136) minutes when CTA was done prior to transportation and 55 (IQR 35 to 71) when it was not done (P <0.0001). Controlling for distance, the predicted time of care from spoke door in time to groin puncture at TSC is predicted to be 93.68 minutes longer for patients who receive CTA prior to transport (p=0.034). Conclusion: Our study shows that the DIDO is longer when CTA is conducted at spoke site prior to transportation to TSC. This additional time did not result in shorter door to puncture time at the TSC. Most of the delay occurs during the period from tPA to door out. Obtaining CTA during the initial imaging evaluation might help reducing DIDO time.
Learning Objectives	*CTA obtained in a serial fashion post-tPA exacerbated delays in inter-hospital transfer for stroke patients. *Incorporating CTA upfront with CT for endovascular candidates at spoke sites may minimize delays and facilitate optimal selection of patients for rapid transfer to thrombectomy-capable stroke centers.

Developing a Whole Health Referral Tracking System at the Atlanta Veterans Affairs Health Care System

P05

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Developing a Whole Health Referral Tracking System at the Atlanta Veterans Affairs Health Care System**
Abstract	Background/Knowledge Gap: The Whole Health System(WHS) is a healthcare delivery model that shifts the focus from disease-centered care to Veteran-centered care by utilizing Integrative Medicine modalities. The Atlanta Veterans Affairs Health Care System(AVAHCS) is one of 18 national flagship sites implementing the WHS. AVAHCS is tasked with recruiting 30% of unique Veterans into the WHS in the first three years of funding. There is no system to track referrals to support recruitment efforts. We developed and are implementing an electronic tracking system for Veterans participating in the Whole Health Introduction(WHI) group appointment. Methods/Design: We utilized a Model for Improvement quality improvement framework and mixed methods approach(Figure1). The survey template, implemented at 3 AVAHCS sites, was embedded within the electronic health record(EHR). Our primary process measure was completion of the electronic template, defined as number of completed templates entered into the EHR divided by total

	number of unique Veterans that attended the WHI at one of three AVAHCS clinical sites. The first Plan-Do-Study-Act cycle(PDSA 1) consisted of providing all WHI facilitators with a detailed template protocol. The second PDSA cycle(PDSA 2) involved a telephone conference and in-depth interviews with WHI facilitators to understand barriers to template implementation and to provide additional instruction about the template. Results/Findings: PDSA 1 was conducted between May 1-June 11, 2018 with overall completion rate of 78.6%(siteA: 100%, siteB: 50%, siteC: 80%). PDSA 2 occurred between June 15-July 5, 2018 with an overall completion of 70.6%(siteA:0%, siteB:100%, siteC:100%). Conclusions/Implication: Completion rates following PDSA1 were high, but not sustained after PDSA2. Our in-depth interviews revealed lack of awareness of survey entry into EHR as a potential barrier to completion. For PDSA3 we will perform individualized educational assistance for facilitators that did not reach 100% completion. Additional PDSA cycles to optimize survey completion are warranted to create a surveillance system for referral tracking.
Learning Objectives	1. Apply a Model for Improvement framework to implement a survey template for the development of an electronic patient referral tracking system. 2. Create, maintain, and analyze a tracking system to evaluate referral patterns and tailor Veteran recruitment.
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Commensal Microbiota Influence on Mesenchymal and Hematopoietic Differentiation in Osteoimmunology

P06

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Title	**Commensal Microbiota Influence on Mesenchymal and Hematopoietic Differentiation in Osteoimmunology**
Abstract	Commensal Microbiota Influence on Mesenchymal and Hematopoietic Differentiation in Osteoimmunology

	M.E. Chew, J.D. Hathaway-Schrader, J.D. Aartun, N.A Poulides, C.M. Novince BACKGROUND: Commensal microbiota regulation of host immunity induces osteoimmune response effects, which critically influence skeletal metabolism. Despite knowledge that the commensal microbiota modulates immune cell – bone cell interactions, the commensal microbiota impact on mesenchymal and hematopoietic cell differentiation are not well understood in the bone marrow environment. Study purpose was to delineate commensal microbiota immunoregulatory effects on marrow osteoclastogenesis, megakaryopoiesis, and adipogenesis at alveolar bone and non-oral skeletal sites. METHODS: 12-week-old C57BL/6 specific-pathogen-free vs. germ-free mice, and C57BL/6 mice administered antibiotics (vancomycin/neomycin/imipenem-cilastatin) from age 6 to 12 weeks, were employed to discern the commensal microbiota role in bone marrow osteoclastogenesis, megakaryopoiesis, and adipogenesis. Histomorphometric analyses were performed in maxillary alveolar bone and proximal tibia. Osteoclastic cell outcomes were evaluated in TRAP stained tissue sections. Megakaryocyte numbers and adipocyte area were assessed in H&E stained tissue sections. qRT-PCR and nCounter gene expression studies were carried out in mandible alveolar bone marrow and femur bone marrow. RESULTS: TRAP+ osteoclast numbers and size were enhanced in maxillae, whereas osteoclast size was increased in tibiae of SPF vs. GF mice. While there were no differences in megakaryocyte and adipocyte outcomes in the tibia, there was a trend towards increased megakaryocyte numbers in the maxillae of SPF vs. GF mice. Antibiotic administration enhanced TRAP+ osteoclast numbers and size, and marginally suppressed adipocyte area, in the tibia of antibiotic vs. vehicle-control treated mice. Paralleling the decreased adipocyte area in tibia marrow, Pparg RNA (*marker for marrow adipogenesis) was downregulated in femur marrow of antibiotic treated mice. CONCLUSION: SPF vs. GF mouse model findings intriguingly suggest the oral microbiota has local immunoregulatory effects that uniquely modulate alveolar bone marrow osteoclastogenesis and megakaryopoiesis. Outcomes from the antibiotic administration model demonstrate that exogenous disruption of commensal microbiota modulates bone marrow osteoclastogenesis and adipogenesis at non-oral skeletal sites.
Learning Objectives	1) Describe commensal microbiota osteoimmunoregulatory effects on cellular differentiation in the bone marrow environment. 2) Describe microbiome-mediated differences in cellular differentiation between site-specific bone marrow environments.
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How Do Patients Perceive the Character of Care They Receive For Ambulatory Care-Sensitive Conditions in the Emergency Department?

P07

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**How Do Patients Perceive the Character of Care They Receive For Ambulatory Care-Sensitive Conditions in the EmergencyDepartment?**
Abstract	Abstract: Study Objectives: We sought to determine if patients who come to an urban academic Emergency Department (ED) believe they receive the same healthcare benefit from treatment of their ambulatory care sensitive conditions (ACSC) as they could receive from a Primary Care Clinic (PCC). Methods: 384 adult patients were administered a twenty-two item survey in an urban, academic ED regarding their perceptions about the benefit of ED-based treatment of Ambulatory Care Sensitive Conditions (ACSCs). The index question was “Where do you believe you receive the best treatment to prevent heart attacks, strokes, kidney failure and cancer?” Surveys were administered by student teams via tablet computers and SAS version 9.4 was used to produce summary statistics and logistic regression analysis. Results: 326 of our patients had a preexisting ACSC and comprised our sample for analysis. While controlling for Perceived Medical Home (MH), Coming to the ED for treatment of an ACSC, Payor type, Trust in the Emergency Provider (EP), Sex and Race, there was no difference in perception of which locale provided the best preventive care between those who had an ACSC and came to the ED for treatment of an ACSC and those who did not; OR 0.877; 95% CI 0.553-1.390. Men (OR 1.728; 95% CI 1.055-2.830) and non-Caucasians (OR 2.058; 95% CI 1.240-3.414) were more likely to believe the ED provided better preventive care for ACSC related disease. Patients who visited the ED during a weekday (OR 1.703; 95% CI 1.051, 2.760) were also more likely to hold this belief. Conclusion: Patients with preexisting ACSCs, especially men, non-caucasions and those who visited the ED during weekdays, who came to the ED for treatment of an ACSC, demonstrated an expectation of receiving equivalent preventive care to that which they could receive from a PCC. This evidence supports future research about whether the practice of EM should be expanded to include delivery of rudimentary Primary Care.
Learning Objectives	Upon completion of this lecture, learners should be better prepared to 1) Describe the expectations of patients who come to the ED for treatment of ambulatory care sensitive conditions (ACSC). 2) Characterize patients who consider the ED to provide the same healthcare benefit as primary care. 3) Discuss the need for an ED-based system to deliver rudimentary Primary Care to patients with ACSCs who treat the ED as their MH.
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Development of Cerebral Venous Thrombosis (CVT) in a patient with Diamond-Blackfan Anemia

P09

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Disclosure	No relevant financial relationships to declare
Title	**Development of Cerebral Venous Thrombosis (CVT) in a patient with Diamond-Blackfan Anemia**
Abstract	INTRODUCTION: This case illustrates the harm in the lack of thrombosis risk factor assessment in determining the candidacy of OCPs for a patient with known Diamond-Blackfan anemia. Additionally, it illustrates the intensive management of CVT, a potentially life-threatening illness. CASE PRESENTATION: A 27-year-old white female with a history of Diamond-Blackfan anemia, dependent on monthly transfusions and chronic prednisone therapy, frequent sinusitis, otitis, and pneumonia was placed on OCPs at the age of 16 years old for primary dysmenorrhea. On the morning of presentation, the patient was found unresponsive at 0430 followed by a seizure, with 2 additional seizures en route to the hospital. Physical exam found the patient to be lethargic with a right facial droop, right sided extremity weakness, and positive right Babinski reflex. Differential Diagnosis: CVT, Arterial Stroke, Syncope, Hypoglycemia, Meningitis, Brain Abscess, Brain Neoplasm. Stat CT head and CT Venography showed sagittal sinus thrombosis with left hemisphere venous infarct with hemorrhagic conversion. Laboratory workup revealed mild leukocytosis and mild anemia without evidence of coagulopathy. BNP, toxicology screen, blood cultures, and hypercoagulable panel were unrevealing. Sputum culture found pansensitive pseudomonas. FINAL DIAGNOSIS: Cerebral Venous Thrombosis MANAGEMENT: On arrival to the ED, the patient was evaluated by neurology and neurosurgery, discontinued on OCPs, and treated with a heparin drip, cefepime, and fosphenytoin; She was admitted to the ICU with frequent neurologic monitoring. On day 2, the patient had neurologic deterioration with signs of uncal herniation and CT evidence of worsening cerebral edema causing significant midline shift. The patient was taken to the OR for left decompressive hemicraniectomy and expansile duraplasty. The remainder of the hospital course was notable for breakthrough seizures, that were managed with addition of levetiracetam, and a plan for discharge to a rehabilitation center.
Learning Objectives	1. Identify the risk factors for Cerebral Venous Thrombosis 2. Implement the AHA/ASA algorithm for the management of CVT

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PREVALENCE AND PREDICTORS OF WHITE COAT HYPERTENSION AMONG NEWLY-DIAGNOSED HYPERTENSIVE PATIENTS IN A TERTIARY HEALTH CENTRE IN NIGERIA

P11

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Title	**PREVALENCE AND PREDICTORS OF WHITE COAT HYPERTENSION AMONG NEWLY-DIAGNOSED HYPERTENSIVE PATIENTS IN A TERTIARY HEALTH CENTRE IN NIGERIA**
Abstract	ABSTRACT Background: Failure to diagnose and adequately classify newly-diagnosed hypertensives may lead to non-recognition of white coat hypertension and inappropriate use of anti-hypertensive. This study determined the prevalence and predictors of white coat hypertension among newly-diagnosed hypertensives in a tertiary health centre in Nigeria. Methods: One hundred and twenty newly-diagnosed hypertensive patients and 120 control were recruited for the study. All the participants had 24-hour ambulatory blood pressure monitoring (ABPM) using an oscillometric device (CONTEC®). Data were analyzed using SPSS version 20.0. Results Out of 120 patients, 52 were males and the mean age was 44.2 ± 9.7 years whereas of the 120 control, 53 were males and the mean age was 44.0 ± 7.5 years. The mean body mass index of the patients, BMI (27.0 ± 4.5kg/m²) was higher than control (24.1 ± 4.5kg/m²), p-value <0.001. Among the patient's group, the prevalence of white coat hypertension (WCH) was 36.7%. The mean age and BMI of those with WCH were 43.3 ± 11.4 years and 26.4 ± 4.5kg/m2 respectively. Females constituted a greater proportion (70.5%). In multivariate analysis, level of education and being overweight or obese were significant determinants of WCH. Conclusion: High prevalence of WCH existed among participants studied. The level of education and overweight or obesity were predictors of white coat hypertension. Hence, ambulatory blood pressure monitoring should be included as part of routine work-up for newly-diagnosed hypertensives in order to limit the number of those who may be committed to lifelong antihypertensive medications with its unwanted side effects.

	Key words: prevalence, predictors, white coat hypertension, newly-diagnosed hypertensive patients, Nigeria.
Learning Objectives	Upon completion of this lecture, learners should be better prepared to: 1. identify the prevalence of white coat hypertension among newly-diagnosed hypertensives in a tertiary health centre in Nigeria. 2. identify the predictors of white coat hypertension among newly-diagnosed hypertensives in a tertiary health centre in Nigeria.
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Posttraumatic Stress Disorder (PTSD) with comorbid psychosis in migrants and refugees

P12

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Disclosure	No relevant financial relationships to declare
Title	**Posttraumatic Stress Disorder (PTSD) with comorbid psychosis in migrants and refugees**
Abstract	Background/Knowledge Gap: Migrants, refugees and individuals from war torn countries have an estimated prevalence rate of PTSD of 10-30% compared to the US prevalence of PTSD of 7% with similar or higher prevalence of PTSD comorbid psychosis (PTSD psychosis) than US Americans. Some data suggests that first and second-generation migrants are at high risk of psychosis. The limitations to examining PTSD psychosis in migrants and refuges includes, but are not limited to cultural and language barriers, cultural appropriateness of psychosis, fear of legal consequences (i.e deportation) and many more. Equally important is identifying and proposing evidence based clinical practices to help these individuals such as cultural formulation interviews or cultural consultation services. Methods/Design: We conducted a systematic review to identify, describe and diagnose PTSD psychosis in migrants and refugees using 38 databases, a panel of three reviewers and a critical appraisal tool to review the literature. Results/Findings: While there are numerous study biases on current literature on PTSD and comorbid psychosis in migrants and refugees, some treatment managements such as Cultural Formulations have been found to be beneficial. Conclusions/Implications: We hope to better characterize PTSD psychosis in migrants and refugees and to provide evidence-based practices for clinicians.
Learning Objectives	1. Have increased knowledge on PTSD and comorbid psychosis in the migrant and refugee populations 2. Learn at least two ways to improve diagnosis and treatment management
References and Resources	Adeponle et al 2012. Using the cultural formulation to resolve uncertainty in diagnoses of psychosis among ethnoculturally diverse patients. Adeponle et al 2015. Clinician reasoning in the use of cultural formulation to resolve uncertainty in the diagnosis of psychosis Close et al 2016. The mental health and wellbeing of first generation migrants: a systematic-narrative review of reviews Polcher and Calloway 2016. Addressing the Need for Mental Health Screening of Newly Resettled Refugees: A Pilot Project

Marijuana induced Sick Sinus Syndrome requiring Permanent pacemaker

P14

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Marijuana induced Sick Sinus Syndrome requiring Permanent pacemaker**
Abstract	Introduction Marijuana is the most commonly used recreational drug in the United States. It has a half-life of 30 hours. The most common cardiovascular effect being increased vagal tone. Few cases related to Marijuana induced Asystole, vasovagal syncope and cardiac arrest have been documented in the past but Sick sinus syndrome has never been reported so far. Sick sinus syndrome is a disorder of SA node manifesting as atrial arrhythmia, severe bradycardia, Tachy Brady arrhythmia or sinus arrest. To our knowledge, this is the first reported case of marijuana induced sick sinus syndrome requiring permanent pacemaker. Considering multiple episodes of syncope, history of road traffic accident secondary to syncope and lack of sufficient data regarding quitting the marijuana would reverse sick sinus syndrome, patient was discharged home after pacemaker placement. Case Presentation 27 years old male with a medical history of chronic Marijuana abuse was admitted due to syncope. Patient reported atleast 1-2 episodes of syncope every month since 5 years and was never worked up for syncopal episodes. He also had a history of motor vehicle accident due to syncope and had cervical injuries. EKG showed sinus bradycardia with HR of 54 with negative Troponins, normal TSH levels, but urine drug screen positive for marijuana. Echo showed LVEF of 60% with no structural heart disease. Cardiology recommended loop recorder upon discharge which showed multiple pauses of 5 seconds and 7 seconds with several episodes of sinus tachycardia and runs of Afib. Patient was diagnosed with Sick Sinus syndrome secondary to Marijuana abuse as he acknowledged smoking marijuana daily for 5 years, which could be the only reason for sick sinus syndrome at this age. Patient underwent elective permanent pacemaker implantation without complications. Conclusion Sick Sinus syndrome has a multitude of possible etiologies but it should be considered in the differential diagnosis in patients with Marijuana abuse. In our case, reversible causes of SSS were ruled out other than Marijuana and it is important to understand the fact it can be life threatening for the patient. Upon reviewing the data there is no adequate evidence to support whether quitting marijuana would reverse sick sinus syndrome in these patients and prevent pacemaker implantation in view of recurrent syncope. Our case adds to the literature that sick sinus syndrome related to Marijuana abuse needs to be further investigated. We strongly suggest that there is also a need of more investigation to be done to evaluate the causal relationship between cannabis and sick sinus syndrome.
Learning Objectives	Kind of a new case

Severe Sepsis and Wet Gangrene Caused by Shewanella algae

P15

Presenting Author	Zuzana Talbot, MD, Internal Medicine Resident PGY3, Department of Medicine, Oak Hill Hospital, Brooksville, FL
Disclosure	No relevant financial relationships to declare
Title	**Severe Sepsis and Wet Gangrene Caused by Shewanella algae**
Abstract	Shewanella algae is an emerging human pathogen. We have a relatively little knowledge about its pathogenicity, disease spectrum, incidence, as well as antimicrobial susceptibilities. Shewanella algae is a Gram negative rod that causes four major types of infection: septicemia, skin and soft tissue infections (SSTI), varying from mild cellulitis to severe life-threatening necrotizing fasciitis, hepatobiliary and ear infections. Risk factors include mainly mucocutaneous abrasions or penetrating traumas with marine exposure or consumption of seafood. The persons most at risk to develop the illness due to Shewanella algae include patients with vascular conditions, diabetes, hepatobiliary disease, malignancy and otherwise immunocompromised. We present a case of a patient who was diagnosed with this uncommon but potentially lethal disease, sepsis due to Shewanella algae secondary to SSTI. 69-year-old female with history of diabetes mellitus type 2, suboptimally controlled (HbA1c 8.6%), PAD, CKD stage 3, was brought to the ED with complaint of multiple episodes of passing out. She denied any precipitants, prodromal symptoms, post-event phenomena. On admission, her BP was 78/43, HR 70, Temp 34.4 C, O2 Sat 100% on room air. She was alert, cooperative, had no signs of injury, her heart, lung and abdominal examination was unremarkable, neurological exam was non-focal, peripheral pulses were non-palpable in lower extremities. There was 2+ non-pitting edema with chronic venous stasis changes bilaterally, erythema and edema of the right foot with large black-colored bulla located at dorsum of distal foot (8x10 cm). Labwork showed leukocytosis and elevated creatinine. Sepsis as etiology of patient's syncopal episodes was suspected and aggressive IV hydration and large spectrum antibiotics were initiated. Blood cultures as well as right foot bulla aspirate came back positive for Shewanella algae, pansensitive. Patient's clinical status has stabilized and laboratory parameters improved after rehydration and on IV Cefepime and Vancomycin. However, due to development of right foot necrosis, patient is now scheduled for a transmetatarsal open amputation. Our patient has significant comorbid conditions predisposing her to developing an illness due Shewanella algae. However, we are unclear about the mode of acquisition of this infection, provided that patient denies any activity related to ocean water, eating fish or sea food during past years. Her only risk factor is living in warm climate near coastal area. Although Shewanella infections can have a good clinical outcome if prompt medical, surgical and supportive treatment is initiated, we recommend to advice our patients, who are at increased risk of developing Shewanella infections, to refrain from any recreational or professional activity in proximity of the ocean as well as consuming sea food.
Learning Objectives	Our case is to raise awareness of an uncommonly encountered pathogen, Shewanella algae, and to identify patient populations that are at risk of developing a related significant disease. Upon completion of this lecture, learners should be better prepared to advise their patients about risks related to marine exposure.

Assessing awareness of cancer risk and protective measures within an urban church community

P16

Presenting Author	Neeraja T Chandrasekaran, MD MPH, PGY3 Preventive Medicine Resident, Department of Community Health and Preventive Medicine; Morehouse School of Medicine, Morehouse School of Medicine, Atlanta, GA
Disclosure	No relevant financial relationships to declare
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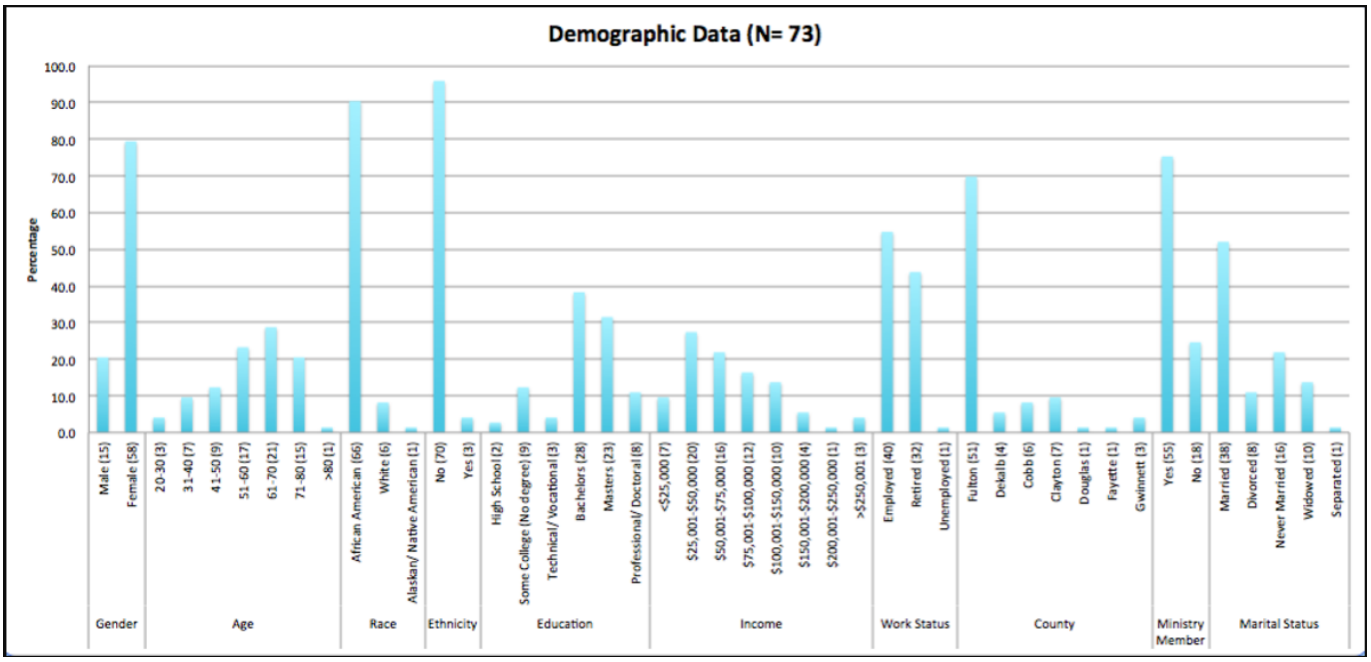
Co-authors Disclosure	No relevant financial relationships to declare
Title	**Assessing awareness of cancer risk and protective measures within an urban church community**
Abstract	Background/Knowledge Gap: Understanding cancer risk and protective measures is important in preventing cancer morbidity and mortality. Typically, faith-based organizations serve as effective setting to assess knowledge and health promotion. The urban church community is a commuter church with a diverse population of approximately 400 churchgoers residing in many different counties within northeastern Georgia Assessments of knowledge for cancer risk and protective factors have not been done within this church. Methods/Design: A cross-sectional design was used for this community assessment. Data was collected through a self-administered survey assessing demographic data and awareness of cancer risk and protective factors for ministry members (MM) versus non-ministry members (NMM) at this church. Surveys were entered into Google docs and analyzed using SAS studio. Chi-square or Fisher's exact test were used for comparing awareness of cancer risk factors and protective factors amongst MM versus NMM. Results/Findings: A total of 73 surveys were completed. Most of the population was female, between 61-70 years old, and African American of non-Hispanic ethnicity, held a bachelors degree, earned an income between $25,001-$50,000, were employed, were MM, and were married(Figure 1). On performing comparative analysis, there were differences between MM and NMM in the awareness of the association between cancer for smoking(p=0.03), physical inactivity(p=0.02), alcohol(p=0.01), pollution(p=0.008), high fat diet(p=0.0032), eating red meat(p=0.005), obesity(p=0.03), intravenous drug abuse(p=0.04), unprotected intercourse(p=0.009), and radiation(p=0.03). There were no differences in knowledge of cancer risk for family history(p=0.05) and exposure to sunlight(p=0.72). There were significant differences in awareness of cancer preventive factors, including exercise(p=0.02), eating green leafy vegetables(p=0.006), and eating fruits(p=0.0013). Conclusion/Implications: Overall, there are differences amongst knowledge of cancer risk factors and preventive behaviors amongst ministry members and churchgoers that aren't ministry members. Community health promotion interventions that address behavioral, environmental, medical cancer risk factors; or education on cancer risk factors are warranted.
Learning Objectives	1. Describe the awareness of cancer risk and protective factors among predominantly African-American churchgoers in Northeast Georgia. 2. Identify interventions to address deficiencies in awareness of cancer risk and protective factors within the community.



Piece it Together: Promoting Healthy Lifestyles for Transitional Age Youth with Neurodevelopmental Disorders

P17

Presenting Author	Carolyn Mae Peterseim, B.A., Medical Student, College of Medicine, Medical University of South Carolina, Charleston, SC
Disclosure	No relevant financial relationships to declare
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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Piece it Together: Promoting Healthy Lifestyles for Transitional Age Youth with Neurodevelopmental Disorders**
Abstract	Background/Knowledge Gap: Transitional age youth with ASD are especially in need of lifestyle options for health promotion and disease prevention as this is a critical age for establishing healthy habits if they are to be maintained in adulthood. Behavior change is difficult without support. These youth often experience high stress levels in social and educational environments, and are frequently prescribed medications associated with psychiatric comorbidities, which lead to increased appetite and potential weight gain. Health care providers often offer good advice but have no viable treatment options to offer and research on treatment is lacking. Methods/Design: Our Piece it Together Comprehensive Wellness program started 4 years ago and has offered 122 total classes year round includes including activities and education on healthy weight behaviors and brain health. We have served 46 individuals in the Charleston community with autism at the MUSC Wellness Center, and the median number of classes attended per person is 26 classes as of June 2018 (STD = 24

	classes). With the support of the SC Council of Disabilities, we have developed a manual that can be replicated and includes our lesson plans and teaching tools. Our multidisciplinary collaboration among experts in neurodevelopment and fitness is innovative, as is the use of neurotypical peers and peer mentors as volunteer coaches is innovative. Our curriculum focuses on improving socialization, stress reduction, nutrition, and exercise. We look for small sustainable changes in mindset and action that make for long term success. Data from pre- and post- testing has been obtained through an MUSC IRB approved study and stored in the MUSC RedCap database. Linear regression (for continuous variables) and logistic regression (for binary variables) were used for analyses. Results/Findings: Findings indicate a potential relationship between attendance and BMI in those participants who began our program overweight or obese. Moreover, we also see a significant increase in the level of fruits and vegetables that our participants reported eating before and after their attendance in our program, though no significant changes in reported daily physical activity level, video games/tv time, or water consumed. Conclusions/Implications: These results suggest that this program is efficacious in helping improve nutrition and BMI for transitional age adults with autism spectrum disorder. However, the efficacy of this program needs to be demonstrated in a randomized trial. In addition, given that transportation and schedules are barriers to participation in our program, we aim to determine whether the same benefits can be achieved when the program is delivered via telehealth.
Learning Objectives	Explain the efficacy and importance of a longitudinal, lifestyle modification program for transitional age adults with high functioning autism and/or mild intellectual disabilities. Describe the four pillars of the Piece it Together program- exercise, nutrition, socialization, and stress reduction.
References and Resources	Program Resources: MUSC Piece it Together. (2017). Medical University of South Carolina. http://academicdepartments.musc.edu/hsc/Programs/Piece%20It%20Together/pieceittogether.htm (2018). MUSC Healthy Charleston Challenge. Medical University of South Carolina. http://academicdepartments.musc.edu/hsc/Programs/Healthy%20Charleston%20Challenge/index.html References: Curtin, C., Must, A., Phillips, S., & Bandini, L. (2017). The healthy weight research network: a research agenda to promote healthy weight among youth with autism spectrum disorder and other developmental disabilities. Pediatr Obes, 12(1), e6-e9. doi:10.1111/ijpo.12109 Eaves, L. C., & Ho, H. H. (2008). Young adult outcome of autism spectrum disorders. J Autism Dev Disord, 38(4), 739-747. doi:10.1007/s10803-007-0441-x Egan, A. M., Dreyer, M. L., Odar, C. C., Beckwith, M., & Garrison, C. B. (2013). Obesity in young children with autism spectrum disorders: prevalence and associated factors. Child Obes, 9(2), 125-131. doi:10.1089/chi.2012.0028 Klein, D. J., Cottingham, E. M., Sorter, M., Barton, B. A., & Morrison, J. A. (2006). A randomized, double-blind, placebo-controlled trial of metformin treatment of weight gain associated with initiation of atypical antipsychotic therapy in children and adolescents. Am J Psychiatry, 163(12), 2072-2079. doi:10.1176/ajp.2006.163.12.2072 Krakowiak, P., Walker, C. K., Bremer, A. A., Baker, A. S., Ozonoff, S., Hansen, R. L., & Hertz-Picciotto, I. (2012). Maternal metabolic conditions and risk for autism and other neurodevelopmental disorders. Pediatrics, 129(5), e1121-1128. doi:10.1542/peds.2011-2583 Lopaczynski, W. (2012). Translational research and behavioral sciences in developmental medicine: metabolic conditions of pregnancy versus autism spectrum disorders. Med Wieku Rozwoj, 16(3), 171-174. Memari, A. H., Ghaheri, B., Ziaee, V., Kordi, R., Hafizi, S., & Moshayedi, P. (2013). Physical activity in children and adolescents with autism assessed by triaxial accelerometry. Pediatr Obes, 8(2), 150-158. doi:10.1111/j.2047-6310.2012.00101.x

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Herpes Zoster Infection and Cardiovascular and Cerebrovascular Events among Patients with Systemic Lupus Erythematosus (SLE)

P18

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Disclosure	No relevant financial relationships to declare
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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Herpes Zoster Infection and Cardiovascular and Cerebrovascular Events among Patients with Systemic Lupus Erythematosus (SLE)**
Abstract	Background: Epidemiologic studies have identified an increased risk of stroke and myocardial infarction after HZ infection. One study examined stroke risk in patients with autoimmune diseases following HZ but did not include patients with SLE. We hypothesize that HZ infection will contribute to the increased prevalence of cardiovascular and/or cerebrovascular events among patients with SLE. Methods: Longitudinal observational registry of patients with SLE followed at MUSC was utilized for this study. Medical chart review was used to confirm SLE diagnosis, HZ status, and outcomes of interest. Descriptive statistics, Chi-square tests (or Fisher's exact when appropriate) were used to compare demographic, cardiovascular, cerebrovascular and disease-specific characteristics among those with HZ and those without. Logistic regression was used to compare groups while adjusting for covariates. Results: 589 participants with definite SLE diagnosis and documentation of HZ status, myocardial infarction and stroke/TIA were included. Among those,105 (17.9%) had confirmed diagnosis of HZ. Of those with a history of HZ, 93.3% were females, while of those without a history of HZ, 89.9% were females ($p = 0.27$). Any history of cyclophosphamide use (13.2% of all patients) was associated with a significantly higher prevalence of HZ (24.8% vs 10.6%, $p<0.01$). Overall, patients with HZ were not more likely to have MI (9.5%) compared to patients without HZ (8.7%, $p=0.78$) and were not more likely to have stroke (14.3%) compared to patients without HZ (17.2%, $p=0.48$). In logistic regression models, significant predictors of HZ infection include history of lupus nephritis (OR 2.4, $p<0.01$) and non-black race (OR 2.7, $p<0.01$), adjusting for gender, age and SLE disease duration.

	Conclusion: Several significant associations between SLE subsets (nonblack race, renal disorder, cyclophosphamide use) and HZ infection risk were observed. However, HZ history did not appear to influence the risk of MI or stroke among patients with SLE in this study.
Learning Objectives	1. This study suggests that non-black race, lupus nephritis and cyclophosphamide use are significant predictors of HZ infection among SLE patients. 2. By addressing the modifiable risk factors and administration of HZ vaccination when appropriate, we will hopefully see decrease incidence and associated morbidity from HZ infection among patients with SLE. 3. This study does not identify increased myocardial infarction, Stroke/TIA events among patients with SLE & HZ infection.
References and Resources	

Elevated Anti-ds DNA antibodies and future risk of Lupus Nephritis

P19

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Disclosure	No relevant financial relationships to declare
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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Elevated Anti-ds DNA antibodies and future risk of Lupus Nephritis**
Abstract	Background and purpose: Lupus nephritis (LN) is the most serious complication of Systemic Lupus Erythematosus (SLE), that poses a significant burden on community and health care system. One study utilized nationwide Medicaid population and identified the prevalence and incidence of LN 30.9/100,000 and 6.9 per100,000 person-years respectively. Another study utilized commercial and public insurance billing data from 81 million population and identified LN burden of 63,256 (20 per 100,000). It carries significant morbidity especially among younger population including frequent hospitalization, missing work or inability to work, growing a family and innumerable other social and financial challenge. One study estimated the health care cost burden of LN via a systemic review of articles published from January 2000 to April 2010 as $29,034–$62,651 annually. Moreover, patients with LN have a 6-fold increased risk of mortality in comparison to general population and a 26-fold increased risk of death who develop end stage renal disease. We are interested in identifying the association between anti-ds DNA antibodies and future risk of developing LN. This important information will help us classifying a high risk SLE population and a closer follow up and perhaps a proactive therapeutic approach for that population might lead to better outcomes. Methods: The patient data base from the Medical University of South Carolina will be used to identify patients with Lupus nephritis and compare them to age, race and sex matched control diagnosed with SLE without LN. As well, data on Anti-Ds DNA antibodies and complement level at different timelines with development of LN will be assessed. Results/Conclusion:

	The results of this preliminary assessment identified 325 patients with biopsy proven LN, mostly females. The number of cases will be used to design a study to identify the association with anti-ds DNA antibodies.
Learning Objectives	-This study identifies the significance of conducting research for patients with lupus nephritis. - This study will help in identifying the population at risk for developing lupus nephritis.

Assessing Feasibility of a Sustainable Faith-based Health Initiative to Encourage Blood Pressure Self-Monitoring

P20

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Assessing Feasibility of a Sustainable Faith-based Health Initiative to Encourage Blood Pressure Self-Monitoring**
Abstract	Background Hypertension affects over a third of the adult population. Hypertension related outcomes account for over 50% of deaths, and 10% of people with hypertension do not know they have it, putting them at greater risk for incurring a cardiac event. Hypertension control rates are sub-optimal with health disparities evident. Hypertension interventions delivered at the community level offer the promise of decreasing cardiovascular disease across many at-risk populations, particularly amongst underserved and disadvantaged communities. For 2018, the Million Hearts 2022 campaign and the American Heart Association/American College of Cardiology called for self-monitoring blood pressure in their guidelines to address hypertension. Out-of-office blood pressure measurements are necessary to support accurate diagnoses of hypertension as well as to encourage personal responsibility in blood pressure management. The church has a long history of being used for health promotion, with little exploration of using the church to promote blood pressure self-monitoring. This project seeks to assess the feasibility of implementing a sustainable faith-based prevention method to address hypertension through encouraging blood pressure monitoring at church. Methods This was done by meeting with pastors to assess interest and then providing them with a blood pressure monitor and support for how to proceed in encouraging blood pressure measuring at their church. Results Pastors and congregation members show interest in blood pressure monitoring within their churches. Conclusions This project recognizes the church as a potential avenue for encouraging out-of-office of blood pressure monitoring, and also has implications for future methods of utilizing religious institutions in addressing hypertension globally.

Learning Objectives	1. Implement a new strategy to encouraging out-of-office blood pressure monitoring. 2. Apply new guidelines outlined by the American Heart Association/American College of Cardiology. 3. Identify faith-based institutions as a community based resource to address hypertension.

Use of a Specific Fixed-Dose Combination Therapy for Hypertension in an Academic Medical Center

P21

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Use of a Specific Fixed-dose Combination Therapy for Hypertension in an Academic Medical Center**
Abstract	Background High blood pressure affects approximately 75 million American adults and increases the risk of stroke and heart disease in those affected, but only a little over half of Americans with hypertension have their blood pressure appropriately controlled. The implementation of evidence-based models of care and treatment protocols is critical to achieve effective hypertension treatment. The Kaiser Permanente Northern California (KPNC) healthcare system has employed a model for effective hypertension control, achieving 90% control with the use of the Lisinopril/Hydrochlorothiazide (HCTZ) single-pill combination (SPC) in its treatment protocol, and the assessment of treatment and control through a 'registry' system. The degree that non-KPNC clinicians currently employ the use of fixed-dose combination medication for antihypertensive therapy is unclear. Methods This pilot project used the Epic electronic health record system at the Medical University of South Carolina (MUSC) to determine the number of hypertensive patients treated with the Lisinopril/HCTZ SPC. Results Of 81,867 hypertensive patients treated at MUSC outside of specialty areas since May, 1st, 2012, the fixed-dose combination of Lisinopril and HCTZ was prescribed to 17,541 patients (21.43%), which is comparable but less than its usage in a model of effective hypertension control in the KPNC healthcare system. 6,804 patients (8.31%) outside of specialty areas were taking Lisinopril and HCTZ concurrently in two separate pills. Conclusions The results of this feasibility assessment indicated that Epic might be an effective way to evaluate treatment patterns for hypertensive patients within an academic medical center. Additional analyses will assess additional combination therapies, as well as disparities in care. Further studies are needed that examine the factors associated with the use of combination therapy for blood pressure control and risks among the different therapies.

Learning Objectives	1. Identify the benefits of using fixed-dose combination medication for antihypertensive therapy when not contraindicated. 2. Describe the level of use of a Lisinopril/HCTZ single-pill combination in an academic medical center.
References and Resources	Jaffe MG, Lee GA, Young JD, Sidney S, Go AS. Improved Blood Pressure Control Associated With a Large-Scale Hypertension Program. JAMA. 2013;310(7):699-705. doi:10.1001/jama.2013.108769.

Infective Endocarditis in Neutropenic Patients

P22

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Disclosure	No relevant financial relationships to declare
Co-authors	Glen Huang, DO, Internal Medicine, Wake Forest; Winston Salem, NC, Kyle Davis, PharmD, Wake Forest; Winston Salem, NC, Tim Oh, MS4, School of Medicine, Wake Forest; Winston Salem, NC
Co-authors Disclosure	No relevant financial relationships to declare
Title	**Infective Endocarditis in Neutropenic Patients**
Abstract	Introduction: Infective endocarditis (IE) is a severe infectious disease with significant mortality and morbidity. Neutropenia is a state of severe immunodeficiency and thus patients are at an increased risk for infection. The population with neutropenia and concomitant IE, however, has not been well described. In this case series we present four patients who were neutropenic at time of their diagnosis of IE. Methods: We performed a retrospective chart review on all patients from January 2013 to June 2017 who had a diagnosis of definite IE per Modified Duke Criteria and neutropenia, defined by an absolute neutrophil count of 1000 cells/µL. We ultimately gathered data on four patients who met this criteria. Results: All patients were male, spanning 34-87 years of age. Two of the patients had methicillin sensitive Staphylococcus aureus infection and the other two patients were diagnosed with culture negative IE. All patients had an absolute neutrophil count of less than 1000 on presentation with an average of 766 cells/µL. There was no multivalvular involvement and there was no predilection for any certain valve in our patients Three of the four patients had septic emboli: two patients with emboli to the brain and one with emboli to the lungs. Two patients expired during their hospital admission while a third was discharged to hospice. The fourth patient expired within 12 months. Conclusion: Infective endocarditis seen in patients with neutropenia is a disease with high rate of inpatient mortality. Similar to IE in the immunocompetent population, Staphylococcus aureus was a common cause of IE in our study. IE should be on the differential for neutropenic patients with bacteremia and a diagnosis warrants aggressive treatment as it is associated with poor outcomes. Given the paucity and severity of illness, more data is needed to guide diagnosis and management in this population.
Learning Objectives	1. Explain the importance of considering infective endocarditis in a neutropenic patient with bacteremia. 2. Discuss management of such patients and the need for future studies given the severity of the disease process.

Working with Faith Communities to Improve Rural Health

P23

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Working with Faith Communities to Improve Rural Health**
Abstract	Background Rural residents experience high rates of chronic disease and premature mortality. To insure successful and appropriate health care approaches, clinicians and public health practitioners must work with rural residents to address health issues. Sustainability, location and community trust make Faith-Based Organizations (FBOs) potentially useful partners to promote health among rural residents. We sought to identify rural health interventions partnering with FBOs. Methods We conducted a PubMed literature review of articles from 2003-2017 using the terms Faith, Health, United States, Religion, and Rural Health. We considered three questions: In rural areas, (1) How can rural residents and FBOs utilize partnerships to improve resident health? (2) What are barriers to partnerships with FBOs? (3) How can barriers to faith-health partnerships be overcome? Findings Forty-three articles provide a snapshot of rural health and FBO partnerships. Of these, 22 (51%) used qualitative methods, 16 (37%) employed quantitative approaches, and 5 (12%) were other. Topics included mental health, chronic disease, falls prevention, HIV/AIDS, and substance abuse. Our analysis suggests several responses to these questions. First, working with faith communities offers potential to improve rural health outcomes. Rural residents tended to view FBOs as trustworthy and preferable to traditional healthcare facilities/services. Second, while faith leaders often welcomed health initiatives, this could sometimes be mixed with tensions related in part to negative rural stereotypes (i.e. fundamentalism, isolationism, homogeneity). Other barriers included transportation, scheduling conflicts, and failure of health organizations to include local residents in implementing the health initiative. Third, health initiatives that achieved community buy-in focused on ethnography to understand health and disease perceptions, community training and capacity building, and involvement of local community leadership and staffing. Conclusions When working with faith communities to improve rural health, efforts should be culturally-appropriate and focus on sustainable implementation, taking evidence-based interventions and culturally adapting them.
Learning Objectives	After the presentation, learners should be better prepared to provide answers to the following questions:

	(1) How can rural residents and FBOs utilize partnerships to improve resident health? (2) What are barriers to partnerships with FBOs? (3) How can barriers to faith-health partnerships be overcome?

Potential Complications of Gastrostromy Tube Placement: A Case Report

P24

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Potential Complications of Gastrostromy Tube Placement: A Case Report**
Abstract	Introduction: Percutaneous Endoscopic Gastrostomy (PEG) is a medical procedure for the placement of a feeding tube through the abdominal wall using a gastroscope. It allows for enteral nutritional support and can also be used for medications and fluids. Dysphagia, tracheostomy, and stroke are potential indications for PEG tube placement. Potential PEG complications include cellulitis, hemorrhage, bowel perforation, peritonitis, gastric ulcers, and gastrocolic fistulas. With a success rate as high as 99.5%, PEG tube misplacement is a rare complication (1). Malposition happens when the gastrostomy tube or the gastrostomy hub is placed in an organ other than the stomach. This includes the small bowel, large bowel, peritoneal cavity or abdominal wall (2). We present an unusual case of gastrostomy tube insertion through the transverse colon into the stomach. Case Presentation: A 71 year old male presented to a long term acute care facility after a prolonged hospitalization due to cardio-pulmonary arrest. Other medical history was notable for diarrhea, aspiration pneumonia, sacral decubital ulcers and protein calorie malnutrition. Laboratory data was benign other than mild hypoalbuminemia, albumin 2.5g/dL, and microcytic anemia. Stools studies for infectious diarrhea were negative. On examination, the PEG tube site was clean with no induration, erythema or leakage. Abdominal imaging demonstrated a PEG tube in the transverse colon instead of the gastric lumen. Final/Working Diagnosis: PEG tube migration into the transverse colon as a complication of gastrostomy tube placement. Management: His enteral feeds were placed on hold and the PEG tube removed via a colonoscopy. A new gastrostomy tube was then placed endoscopically and tube feeds resumed. His diarrhea resolved quickly and nutritional status improved over several weeks. Our case demonstrates one of the few potential complications which can happen inadvertently with PEG tube placement.
Learning Objectives	1. Discuss a complication of percutaneous endoscopic gastrostomy placement 2. Diagnosis of percutaneous endoscopic gastrostomy tube malposition 3. Management of a percutaneous endoscopic gastrostomy tube malposition

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Gastric Sleeve for Adjunctive Management of Nonalcoholic Steatohepatitis: A Case Report

P25

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Gastric Sleeve for Adjunctive Management of Nonalcoholic Steatohepatitis: A Case Report**
Abstract	Introduction: The prevalence of Nonalcoholic Steatohepatitis (NASH) has increased 2.5-fold over the last 20 years in the United States (1). NASH is currently the second most common etiology for liver transplant listings, and in women is the leading cause (2). Life-style changes to include weight loss, diet and exercise remain the core interventions to help prevent progression of NASH. Sleeve gastrectomy, an alternative to gastric bypass, results in significant weight loss and improvement in obesity-related co-morbidities such as glucose metabolism and metabolic syndrome. We present a patient who had a sleeve gastrectomy as adjunctive treatment for NASH. Case Description: A 59 year old female presented to the Gastroenterology clinic for evaluation of NASH and abnormal liver enzymes. She had elevated liver enzymes, alkaline phosphatase 173 IU/L, aspartate aminotransferase 63 IU/L, alanine aminotransferase 86 IU/L, with a normal bilirubin 0.3 mg/dL. Fasting labs were notable for a glucose of 130 mmol/L, insulin level of 72 mIU/L, and calculated Homeostatic Model Assessment for Insulin Resistance (HOMA-IR) of 23.1. Other labs for viral, inherited and acquired etiologies for abnormal liver studies were benign. The patient subsequently had a sleeve gastrectomy and lost 60 lbs over 4 months. Her transaminases normalized and insulin dropped to 13 mIU/L with a calculated HOMA-IR of 3.1

	Final/Working Diagnosis: NASH related dysmetabolic syndrome. Management/Outcome/Follow-up: The patient will continue dietary changes and exercise to emphasize a healthy lifestyle. Her gastric sleeve will help with long-term weight loss management which is key to controlling insulin resistance and prevention of further liver damage.
Learning Objectives	1. Implement a new strategy for the treatment of nonalcoholic steatohepatitis 2. Discuss a novel application for sleeve gastrectomy 3. Describe the efficacy of sleeve gastrectomy for nonalcoholic steatohepatitis management.
References and Resources	1. Kabbany MN, Conjeevaram Selvakumar PK, Watt K, Lopez R, Akras Z, Zein N, Carey W, Alkhouri N. Prevalence of Nonalcoholic Steatohepatitis-Associated Cirrhosis in the United States: An Analysis of National Health and Nutrition Examination Survey Data. Am J Gastroenterol. 2017 Apr;112(4):581-587. doi: 10.1038/ajg.2017.5. Epub 2017 Feb 14. PubMed PMID: 28195177 2. Noureddin M, Vipani A, Bresee C, Todo T, Kim IK, Alkhouri N, Setiawan VW, Tran T, Ayoub WS, Lu SC, Klein AS, Sundaram V, Nissen NN. NASH Leading Cause of Liver Transplant in Women: Updated Analysis of Indications For Liver Transplant and Ethnic and Gender Variances. Am J Gastroenterol. 2018 Jun 8. doi: 10.1038/s41395-018-0088-6. [Epub ahead of print] PubMed PMID: 29880964. Further Study: Nickel F, Tapking C, Benner L, Sollors J, Billeter AT, Kenngott HG, Bokhary L, Schmid M, von Frankenberg M, Fischer L, et al. Bariatric Surgery as an Efficient Treatment for Non-Alcoholic Fatty Liver Disease in a Prospective Study with 1-Year Follow-up : BariScan Study. Obes Surg. 2018 May;28(5):1342-1350. doi: 10.1007/s11695-017-3012-z. PubMed PMID: 29119336. Ruiz-Tovar J, Alsina ME, Alpera MR; OBELCHE Group.. Improvement of nonalcoholic fatty liver disease in morbidly obese patients after sleeve gastrectomy: association of ultrasonographic findings with lipid profile and liver enzymes. Acta Chir Belg. 2017 Dec;117(6):363-369. doi: 10.1080/00015458.2017.1334858. Epub 2017 Jun 6. PubMed PMID: 28585487. Shouhed D, Steggerda J, Burch M, Noureddin M. The role of bariatric surgery in nonalcoholic fatty liver disease and nonalcoholic steatohepatitis. Expert Rev Gastroenterol Hepatol. 2017 Sep;11(9):797-811. doi: 10.1080/17474124.2017.1355731. Epub 2017 Jul 21. Review. PubMed PMID: 28712339. https://www.niddk.nih.gov/health-information/liver-disease/nafld-nash

Maintained Efficacy and Safety of Sodium Zirconium Cyclosilicate for Hyperkalemia: 12-Month, Open-Label, Phase 3 Study

P26

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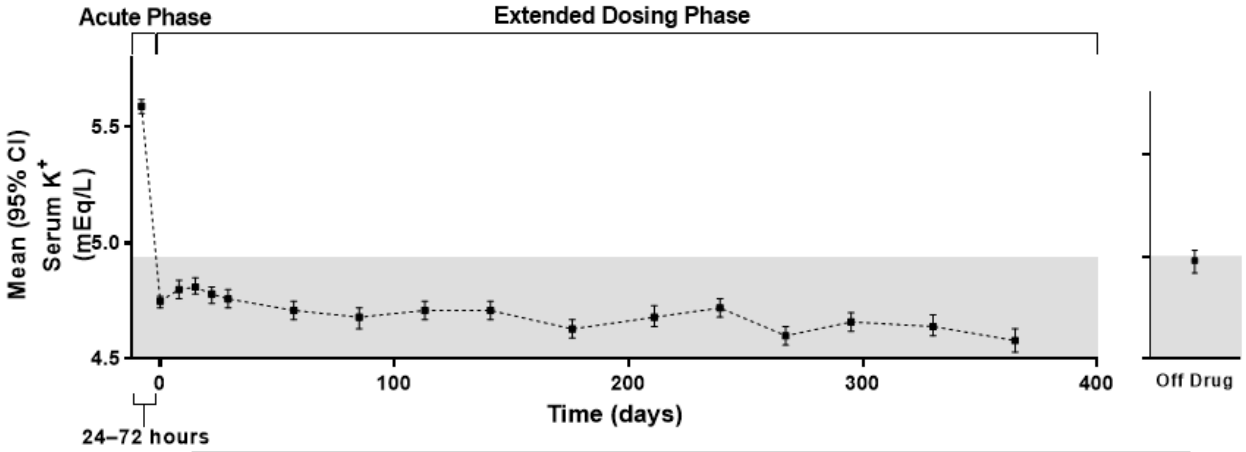
Title	**Maintained Efficacy and Safety of Sodium Zirconium Cyclosilicate for Hyperkalemia: 12-Month, Open-Label, Phase 3 Study**
Abstract	Background: We evaluated sodium zirconium cyclosilicate (SZC), an oral, highly selective potassium (K) binder for hyperkalemia over 12mo. Methods: This international, multicenter, open-label, single-arm, phase 3 trial enrolled 751 outpatients (≥18y) with K ≥5.1mEq/L. In acute phase (AP), patients (pts) received SZC 10g TID for 24–72h until K ≤5.0mEq/L by point-of-care device (iSTAT). A total of 746 pts with K 3.5–5.0mEq/L by iSTAT entered an extended phase (EP) and received SZC titrated to K ≤5.0mEq/L (5g to start, min 5g every other day, max 15g daily) for ≤12mo without diet or RAASi restrictions. Primary endpoints were measured by central laboratory: % with normal K acutely; % with K ≤5.1 or ≤5.5mEq/L during 3-12mo; mean K; adverse events (AEs). Results: Pts had a median age of 64y, 74% had eGFR <60, 15% had heart failure, and 70% were on RAASi. During AP, baseline mean K decreased from 5.6 to 4.8mEq/L; K 3.5-5.0mEq/L was achieved in 99% and 78% of pts when assessed by iSTAT and central laboratory, respectively; K 3.5-5.5mEq/L was achieved in 99% (central laboratory). Overall, 466 (62.5%) completed EP. Mean daily SZC dose was 7.2g. Normokalemia was maintained up to 12mo [Figure]. During EP, mean K ≤5.1 or ≤5.5mEq/L was achieved in 88% and 99% of pts over 3-12mo, respectively; 489 (65.5%) pts experienced an AE and 21.6% a serious AE. There were 8 (1.1%) deaths. Common AEs (>5%) were hypertension, peripheral edema, urinary tract infection, constipation, and anemia. Laboratory-determined hypokalemia (<3.5mEq/L) occurred in 5.8% (1.2% with K 2.5-<3.0). Conclusion: SZC treatment rapidly reduced K in pts with hyperkalemia and maintained normokalemia for up to 12mo; safety profile was consistent with prior studies and acceptable for this patient population. Fishbane, et al [abstract] J Am Soc Nephrol. 28,2017:390.
Learning Objectives	Upon completion of this presentation learners should be better prepared to: • Describe the acute treatment of hyperkalemia (potassium ≥5.1 mEq/L) with thrice-daily dosing of sodium zirconium cyclosilicate 10 g to achieve normokalemia • Describe the chronic treatment of hyperkalemia (potassium ≥5.1 mEq/L) with once-daily dosing of sodium zirconium cyclosilicate to maintain normokalemia for up to 12 months



Day	1	8	15	22	29	57	85	113	141	176	211	239	267	295	330	365	OD
N	746	733	713	705	702	676	646	620	604	590	560	546	527	511	498	469	597

Time Point	Mean (95% CI) Serum K+ (mEq/L)	Mean (%) Change From Acute Phase BL (mEq/L)
Acute phase BL	5.59 (5.56–5.62)	NA
Extended phase BL	4.75 (4.72–4.77)	–0.85 (–14.8%)
Off-drug (7 days post -discontinuation)	4.98 (4.92–5.03)	–0.63 (–10.8%)

BL, baseline; CI, confidence interval; OD, off-drug

Mental health and mass shootings: How shooter mental health status impacts media coverage of mass shooting events

P27

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**Mental health and mass shootings: How shooter mental health status impacts media coverage of mass shooting events**
Abstract	Background: Media depictions of individuals with mental illness as dangerous, unpredictable, and incompetent perpetuate negative public perceptions. After a mass shooting, the mental health of the perpetrator is often the topic of media and public speculations. This study investigated relationships between shooter mental health and media coverage of mass shootings.

	Methods: Fifty-three mass shootings carried about by lone gunmen in 2015 were identified from Stanford University's "Mass Shooting in America" database. Online articles about these crimes were then collected via Google search. Eight-hundred-eleven articles were then analyzed for predictor (i.e., characteristics of the shooters and the crimes) and outcome (i.e., categorical details and language qualities) variables. Language usage was also analyzed using Linguistic Inquiry and Word Count (LIWC) software. Results: Articles suggested that 49% of the shooters maybe or definitely had a mental illness. Hierarchical regression analyses controlling for inter-related predictor variables showed that more angry language was used when the shooter was not mentally ill and motive was unknown, and that articles about shooters with mental illness more often focused on the shooter (as opposed to the victims, for example) and included positive details about the shooter. Conclusions/Implication: As a whole, findings suggest that mental illness is seen as a sufficient explanation for committing violent acts such as mass shootings. When an immediate explanation (i.e., mental illness or a motive) is unknown, more angry language is used and less attempt is made to humanize the perpetrator (e.g., by providing positive background) in internet coverage of the crime. Studies with other media have found more directly negative portrayals of mental illness. Future work should explore whether such coverage tendencies are internet-specific or if they reflect changes in public perceptions and media depictions of mental illness.
Learning Objectives	This presentation details media depictions of mental illness to promote audience identification of stigmatizing media coverage and to prompt closer audience examination of their daily news diet.
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Primary Central Nervous System Lymphoma: a rare case and an atypical region of involvement

P28

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Disclosure	No relevant financial relationships to declare
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Co-authors Disclosure	No relevant financial relationships to declare

Title	**Primary Central Nervous System Lymphoma: a rare case and an atypical region of involvement**
Abstract	Introduction Primary central nervous system lymphomas (PCNSL) are an exceedingly rare form of non-Hodgkin lymphoma, accounting for only about 2% of CNS tumours. It is typically seen as a single supratentorial solitary lesion. Case A 79-year-old male presented to the ER with complaints of light-headedness and dizziness, while playing tennis. He also complained of fatigue that began a few days prior. He had no hydration issues and no history of TIA or stroke. His vitals were within normal limits, except for a BP of 171/90, and his physical exam was unremarkable. A non-contrast CT showed no evidence of acute pathologies, and a MRI was not conducted due to metal fragments in his peri-orbital region. Over the next two weeks, he presented to the ER twice with increasing complaints, including, blurred vision, loss of balance, and memory loss. He was admitted on the second ER visit. After the peri-orbital metal fragments were removed, a MRI was conducted, but only showed non-specific vasogenic edema. A few days later, a second MRI was conducted and showed multiple mass like lesions around the choroid plexus of the third ventricle. The patient was initially worked up for a possible infection or cancerous process. CSF analysis relative to serum yielded a marked increased in IgG, creating a strong suspicion for an intracranial cancerous process of B-cell origin necessitating a biopsy. Final diagnosis The biopsy confirmed high grade Primary B-cell CNS lymphoma. During this time the patient also experienced episodes of altered mental status and acute renal failure. Management The patient was initially managed with high dose methotrexate, leucovorin, and rituxin, but has since elected for hospice care. Our case is of interest due to the rarity of PCNSL and the unique location of our patients mass, which is atypical for PCNSL.
Learning Objectives	1. Describe the characteristics of the typical immunocompetant patient that is diagnosed with PCNSL 2. Describe the effect of steroids on intracranial masses and the implications it has for PCNSL's 3. Discuss current strategies in management for PCNSL in the immunocompetant patient

Secondary Sclerosing Cholangitis in Critcally Ill Patients: A Case Report

P29

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Disclosure	No relevant financial relationships to declare
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Co-authors Disclosure	No relevant financial relationships to declare

Title	**Secondary Sclerosing Cholangitis in Critcally Ill Patients: A Case Report**
Abstract	Introduction: Secondary sclerosing cholangitis (SSC) is an unusual disease found in critically ill patients after a prolonged hospital course. It is characterized by progressive intrahepatic and extrahepatic bile duct inflammation leading to hepatic fibrosis and biliary strictures. We present a case of SSC along with a review of the literature. Case Presentation: A 76 year old male was evaluated for biliary cholestasis after a tortuous medical course complicated by sepsis, septic shock, aspiration pneumonia, renal failure and metabolic encephalopathy. There was no history of chronic liver disease or liver decompensation. He was on multiple medications but no recent exposure to common hepatotoxic agents. Transaminases prior to admission were normal and subsequently increased over six weeks, aspartate aminotransferase at 109 U/L, alanine aminotransferase at 105 U/L, alkaline phosphatase 1379 U/L and gamma-glutamyl transferase at 600 U/L . Total bilirubin was normal. Liver and abdominal imaging were notable for a small amount of ascites, normal liver contours and no splenomegaly. Hepatitis panel was negative. There were no subjective complaints and physical exam was otherwise fairly benign. SSC was diagnosed and patient treated with supportive care. Final Diagnosis: Secondary Sclerosing Cholangitis Management: Literature on SSC is limited(1) and only recently described. Few treatment options exist.(2) Bacterial cholangitis as a result of SSC biliary strictures should be treated with broad spectrum antibiotics,(3) although studies report frequent antibiotic resistance of isolates(4) that may present therapy challenges. Endoscopic retrograde cholangiopancreatography (ERCP) may be used for removal of biliary casts, intermittent stenting, sludge extraction, endoscopic dilations, or sphincter of Oddi sphincterotomy.(5) These therapies may be associated with short-term improvement, but they do not appear to prevent disease progression.(4) The majority of cases require liver transplantation with a resulting 1-year survival rate of 85% and 3-year survival rate of 83% reported.(6)
Learning Objectives	Discuss the pathophysiology of Secondary Sclerosing Cholangitis and when it should be included in the differential diagnosis of liver cholestasis, particularly after an extended critical care stay, to improve mortality outcomes.
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Case of Neonatal Fatality from Neuromuscular Variant of Glycogen Storage Disease Type IV

P30

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Title	**Case of Neonatal Fatality from Neuromuscular Variant of Glycogen Storage Disease Type IV**
Abstract	Glycogen storage disease type IV (GSD-IV) or Andersen disease is an autosomal recessive disorder that results from deficiency of glycogen branching enzyme (GBE), which results in accumulation of abnormal glycogen molecules that have longer outer chains and fewer branch points. This disorder manifests with a variable phenotype depending on the degree and type of tissues in which this abnormal glycogen accumulates. Typically, GSD-IV presents with rapidly progressive liver cirrhosis and death in early childhood. The severe congenital neuromuscular variant form has been reported in fewer than 20 patients in the literature thus far. We report an unusual case of GSD-IV neuromuscular variant in a late preterm infant who had severe hypotonia and respiratory failure with no hepatic or cardiac involvement. Molecular analysis by whole exome sequencing revealed two pathogenic variants in the GBE1 gene. Our patient was thus a compound heterozygote of the two pathogenic variants, one of these was inherited from the mother and the other pathogenic variant was de novo.
Learning Objectives	Describe unusual case of GSD-IV neuromuscular variant in a late preterm infant. Compare the different presentations of infants with GSD-IV neuromuscular disease Discuss the disease and current knowledge on this disease
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Odds against the odds: Streptococcal Toxic Shock Syndrome (STSS) secondary to Phlegmonous Gastritis (PG)

P31

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Title	**Odds against the odds: Streptococcal Toxic Shock Syndrome (STSS) secondary to Phlegmonous Gastritis (PG)**
Abstract	PG is an uncommon, but fatal, pyogenic infection of the gastric wall. Most cases are diagnosed after gastrectomy/autopsy. The mortality is reduced with the improvement in antibiotic therapy. PG is divided into primary, secondary, and idiopathic types. The causative agent is Streptococcus species in approximately 70% cases. S. pyogenes can produce toxins-super antigens that stimulate cytokine production, with resulting STSS. Case 62 y/o male with medical history of HIV on HAART (viral load of 6700 units/ml) and membranous glomerulonephritis with nephrotic syndrome, presented with complaints of epigastric abdominal pain for 3 days associated with watery diarrhea, vomiting, and fever of up to 102.2 F. On exam, BP 100/70 mmHg, HR 100/min, RR 24/min, and Temperature 96.8 F, tenderness to palpation in epigastric area, guarding and voluntary defense. He denied thoracic pain and ECG showed no acute abnormalities. Labs included WBC 4060 cel/ul, Hb 14 gm/dL, platelets 144000 cel/ul, creatinine 4.12 mg/dl, Na 130 mEq/l, K 3.34 mmol/l, CK 117 ng/ml, troponin T >12 ng/ml, PCR 362 mg/dL. Abdominal CT showed diffuse thickening of the stomach wall but no ascites or pneumoperitoneum. Cardiac cath was negative. Initial diagnosis of acute gastroenteritis with pre-renal AKI was made and admitted to the Progressive Care Unit and was placed on ciprofloxacine. EGD showed grade C esophagitis and

	probable PG. The patient developed hypotension with inadequate response to fluid resuscitation, and transferred to ICU. The patient required vasopressor support and invasive monitoring findings were consistent with distributive shock with SVV >20% requiring optimization of volume repletion. The patient had persistent oliguria requiring CVVRT. Pharyngeal cultures were positive for group A streptococcus. Gastric cultures and EGD pathology results were consistent with PG. Due to the possibility of STSS, the antibiotic spectrum was broadened to piperacillin-tazobactam plus clindamycin. Eventually, the patient went into respiratory failure with bilateral infiltrates on chest X-ray and evidence of fluid overload. A trial of non-invasive ventilation was unsuccessful, and he required endotracheal intubation and IMV. Negative fluid balance was obtained with CVVRT and furosemide. The patient had spontaneous diuresis and normalization of kidney function, total parenteral nutrition was initiated , vasopressors were discontinued and he was transferred to the PCU. Discussion PG is a very unusual infection in the post antibiotic era. The current literature is limited to case reports or case series. Our patient had idiopathic type PG due to immunosuppression from HIV. The patient also met the CDC criteria for STSS: SBP <90 mmHg and multi-organ involvement. Blood cultures were positive for GAS with good response to supportive and antibiotic treatment. The present case underscores the high level of suspicion and initiation of prompt therapy due to the high mortality rate of PG with STSS.
Learning Objectives	Recognize the possible presence of streptococcal toxic shock syndrome in a patient with signs and symptoms of shock and the presence of a source of Streptococcus group A infection. Identify the criteria for diagnosis of Streptococcal Toxic Shock Syndrome. Recognize Phlegmonous Gastritis as a rare entity with hight morbidity and mortality requiring prompt antibiotic treatment.
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When The Grass Appears Greener: Was It Fertilized By Spice? Rodenticide Poisoning From Synthetic Marijuana

P34

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Co-authors Disclosure	No relevant financial relationships to declare
Title	**When The Grass Appears Greener: Was It Fertilized By Spice? Rodenticide Poisoning From Synthetic Marijuana**
Abstract	Introduction: Long-acting Anticoagulant Rodenticide (LAAR) exposure or poisoning is a growing public health problem. Cases may be associated with accidental exposure, suicide attempts, or Munchausen syndrome, and may be difficult to diagnose. This report should increase the awareness of clinicians when examining a patient with a history of drug abuse, who present with a coagulopathy consistent with vitamin K deficiency and whose condition does not resolve with large doses of parenteral vitamin K therapy, LAAR exposure or poisoning should be a differential if they are not on warfarin/inhibitor therapy and do not have liver disease. Case Presentation: 38-year-old male smoker with no significant past medical history presented to the Emergency Department with recurrent, unprovoked, epistaxis. He also complained of abdominal pain radiating to left testicle and easy bruising. He denied use of antiplatelet agents. He admitted to chronic daily synthetic marijuana use, buying from the same dealer but it was lighter in color since past two weeks. Vital signs revealed a heart rate- 74/min, blood pressure- 155/100 mm of Hg. His examination was significant for blood in the left nare and left costovertebral angle tenderness. Labs showed Hemoglobin- 10.1 gm/dl, prothrombin time (PT)- 236.2 sec, activated partial thromboplastin time- 115.7 sec, INR- 20.1, fibrinogen- 651 mg/dl, d-dimer elevated and hemoccult positive. Computerized tomography of abdomen and pelvis showed no hematoma. Final Diagnosis: Supratherapeutic INR due to synthetic rodenticide-laced marijuana poisoning. Management: He was managed with two units of fresh frozen plasma, 10 mg intravenous vitamin K followed by 10 mg oral vitamin K every six hours, and the vitamin K was increased by 5 mg every six hours until INR was < 2 for 24 hours. His final vitamin K dose was 35 mg every six hours. Epistaxis, abdominal pain and easy bruising resolved. Lab tests revealed Difenacoum and Brodifacoum poisoning. After two weeks on discharge, his PT and INR were 13 and 1.1, respectively. He was followed-up in hematology clinic as an outpatient.
Learning Objectives	examine a patient with a history of drug abuse, who present with a coagulopathy consistent with vitamin K deficiency and whose condition does not resolve with large doses of parenteral vitamin K therapy, LAAR exposure or poisoning should be a differential if they are not on warfarin/inhibitor therapy and do not have liver disease.
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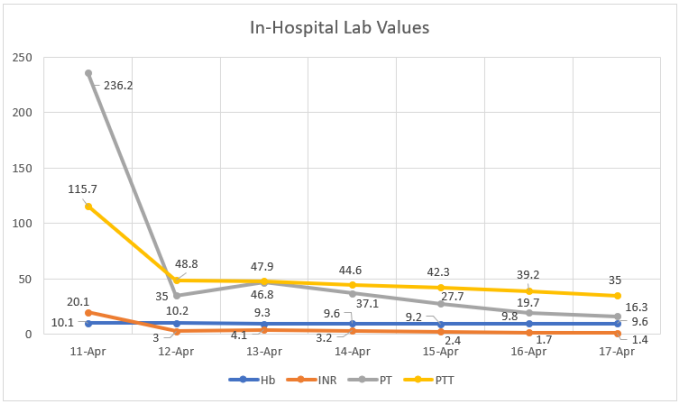

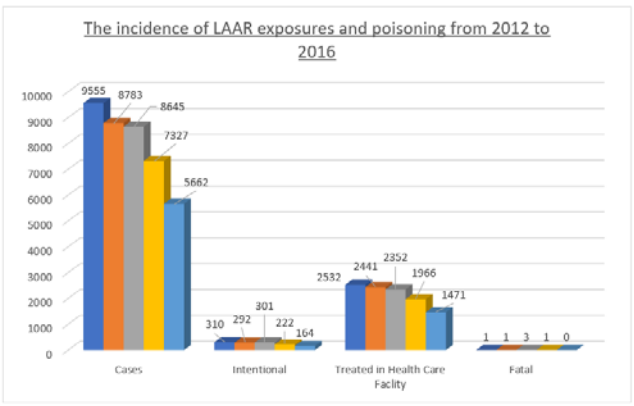

Abdominal Mass(es) in a Female Pediatric Patient

P35

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Title	**Abdominal Mass(es) in a Female Pediatric Patient**
Abstract	Abdominal pain is a common pediatric complaint and poses a diagnostic challenge given the vast number of possible etiologies. In addition to a thorough history and physical and laboratory tests, ultrasonography is a useful modality to help narrow the differential diagnosis and facilitate management. Here we describe a female pediatric patient with a pelvic mass in the setting of abdominal pain that was discovered with ultrasonography with an additional mass visualized in the liver. Case Presentation D.J. – a 10 year old morbidly obese premenarchal female (BMI – 44) with history of constipation presented with worsening RLQ abdominal pain over the last 3 days with associated nausea and vomiting. Patient denied fever, diarrhea, dysuria, hematuria, flank pain or recent trauma. Patient also denied any association of pain with food, skin changes, or constitutional symptoms of weight loss, night sweats. Initial set of vital signs were within normal limits and physical exam impressive for RLQ tenderness without signs of peritonitis or costovertebral tenderness.HEENT, heart and lung and genitourinary examination was within normal limits as well. Ultrasound of abdomen was negative for appendicitis, however, showed a 9x9x10 cm anechoic structure with cystic and solid component in inferior pelvis (right) with normal arterial and venous blood flow without visualization of normal ovary, suggestive of complex ovarian cyst. On further investigation via CT scan of abdomen/pelvis, a 48mm solid, well circumscribed mass was visualized in right lobe of liver. At this time, urinalysis, serum HCG, complete blood count, electrolytes, renal function and liver function were completely within normal limits.

	Gynecology service was consulted, along with pediatric gastroenterology. Given the unclear etiology of the pelvic mass and progressive symptoms, the patient underwent laparoscopy and found to have a torsed right paratubal cyst with normal viable ovary, requiring a right salpingectomy, with uneventful recovery. Liver mass was determined to be focal nodular hyperplasia, requiring no further testing or imaging, given the benign nature of the disease process. Discussion Abdominal mass in a female pediatric patient has a broad differential including, but not limited to ovarian, tubal or peritoneal cysts, primary ovarian, colonic, hepatic or renal tumors, metastases secondary to other tumors, abscess (ovarian, tubal, psoas muscle, colonic, ovarian or tubal torsion, pelvic kidney, ectopic pregnancy and PCOS. Ultrasonography is a good initial imaging modality, however, CT scan and MRI may be warranted to better elucidate the mass. Paratubal cysts are remnants of Wollfian and Mullerian ducts, sensitive to androgens and constitute 3-7% of adenexal masses in pediatric patients. There is a strong association with increasing size of paratubal cysts with obesity, likely due to excess andogen secretion. These are usually asymptomatic; however, can present with symptoms secondary to hemorrhage, rupture and torsion of the cyst or ovary. Given that these cysts are non-physiologic in origin, spontaneous resolution is unlikely and definitive management is operative. Focal Nodular Hyperplasia is generally a benign and asymptomatic lesion of the liver, usually discovered incidentally on radiological investigations. These lesions have a higher association with high estrogen environments. These rarely require surgical intervention, unless symptomatic (abdominal pain, hemorrhage within lesion).
Learning Objectives	- Describe a unique presentation of abdominal mass in a female child - Discuss the use of various imaging modalities to diagnose complex masses in the ER setting - Examine the diagnostic challenge that exists in the ER with patients with abdominal pain
References and Resources	Muolokwu E, Sanchez J, Bercaw JL, et al. The incidence and surgical management of paratubal cysts in pediatric and adolescent population. J Pediatr Surg. 2011;46:2161-216