

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 9:00 – 9:20AM

Presenter: Raina H. Jain, BA
Geisel School of Medicine at Dartmouth
Submission Category: Student Presentation

Case Presentation

Atypical presentation of *C. difficile* in an immunocompromised patient

Authors: Raina H. Jain, BA, Dhruva Tangellamudi, MD, Alexander Fiorentino, MD, Marshall Ward, MD

Abstract:

Statement of Purpose: Impact of pre-test probability of *C. difficile* infection (CDI) on diagnostic work-up and treatment Methods: In the following case report, we present a 60 year-old female immunosuppressed following bilateral lung transplant surgery with an atypical presentation of CDI which may have led to her requiring a colectomy. She presented with absence of leukocytosis, unusual imaging findings, and inability to produce stool samples to confirm CDI, together contributing to a delay in her diagnosis. In this context, we examine prior literature regarding the risk of CDI in the transplant population and consider professional guidelines regarding initiation of empiric treatment in higher-risk populations when confirmatory laboratory testing is not yet available.

Brief Statement of Results: CDI classically presents with diarrhea, leukocytosis, fever, nausea, and anorexia. There is growing evidence that patients with solid organ transplants have a higher risk of contracting CDI, which is often complicated by a more severe course of disease. Lung transplant patients specifically experience increased severity of CDI compared to other solid organ transplant patients due to higher levels of immunosuppression, antibiotic resistance, hypervirulent strains, and increased prevalence of community-acquired strains. In regards to initiating empiric antibiotics for immunosuppressed patients with suspicion for CDI, the American College of Gastroenterology (ACG) recommends therapy for those with a 'strong pre-test suspicion' and stool testing for immunosuppressed patients with a diarrheal illness. The determination of 'pre-test suspicion' appears to be largely based on clinical judgement.

Conclusions and Implications for Future Research: Our patient's pre-test probability of CDI was significantly increased due to her transplant history and immunosuppression. Despite her atypical presentation, the suspicion for CDI could have been considered sufficiently high to warrant initiation of antibiotics per ACG guidelines. This case serves an example of the importance of considering each patient's risk of CDI in the context of their history and allowing clinical judgement to determine the urgency of initiating empiric therapy.

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 9:20 – 9:40AM

**Presenter: Angie Polanco and Henning Ander, MA
Lewis Katz School of Medicine at Temple University
Submission Category: Student Presentation**

Community/Public Health

City's Response to Hepatitis A Outbreak Demonstrates the Role of a Student Run Clinic in Addressing Public Health Crises

Authors: Leah A. Goldberg, MHS; Katie Kwon; Meghan J. Hotz; Henning Ander, MA; Angie Polanco; David O'Gurek, MD; Margot Savoy, MD;

Abstract:

Statement of Purpose: In 2019, the Philadelphia Department of Public Health (DPH) declared an emergency following 154 documented cases of Hepatitis A, compared to an expected 3 cases in the same time frame in previous years. Preliminary research from DPH reports high rates of Hepatitis A among adults who report substance use (67%) and people experiencing homelessness (26%). The One Day at a Time (ODAAT) shelter, which houses a similarly high-risk population, hosts a medical student-run bridge clinic, THRIVE, one day per week. Patients visiting THRIVE constitute a particularly vulnerable and uniquely accessible population. THRIVE leaders contacted DPH to establish a collaboration in the wake of the outbreak.

Methods: Clinic leaders, physician advisors, ODAAT representatives and DPH staff convened to discuss the logistics of implementing vaccine administration at THRIVE. On scheduled nights, DPH staff delivered vaccines. Physician advisors trained medical students to counsel patients on Hepatitis A and safely administer the intramuscular injection. In a "see one, do one, teach one" methodology, students first observed, then administered a vaccine under supervision. Following this model, trained students taught their peers. Each vaccination was cross-checked with the city's registry and documented to prevent overlap of effort and to maintain accurate records. Patients were also provided with cards detailing the vaccination received and due date for their second dose.

Results: THRIVE developed a model to address local health concerns in collaboration with DPH. Over 12 visits, 38 vaccinations were safely administered and 16 first/second year medical students were trained.

Conclusions and Implications for Future Research: Medical student-run clinics can serve as useful resources to address public health crises by providing man-power necessary for emergent responses. In the Hepatitis A outbreak, THRIVE continues to deliver vaccines to high-risk individuals. Moreover, this model serves as a method to promote interdisciplinary collaboration while combating public health emergencies and educating medical students.

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 9:40 - 10:00AM

**Presenter: Mandy L. Maneval, MD, PhD, Faculty and Anne Ivie, MD, Resident
Lewistown Rural Family Medicine Residency Program**

Submission Category: Faculty Presentation

Quality Improvement

Evaluating the impact of Obstetrics Training in Family Medicine residency programs

Authors: Anne Ivie, MD; Mandy Maneval, MD, PhD

Abstract Body: Fewer family medicine physicians are opting to practice obstetrics after graduation for residency. Our residency program is new and located in a rural area; hiring faculty with obstetrics experience has been a significant challenge. We feel this is an important part of training, particularly for physicians who ultimately will practice in rural or under-served areas. This difficulty has been compounded by the fact that our health system currently does not credential FM physicians to practice obstetrics. We hypothesize that we are not alone in this challenge. To meet the training needs of FM residents, we need to better understand this issue in order to create effective, creative solutions for the future. We are currently conducting a voluntary survey of FM residency programs in Pennsylvania to learn how other programs are meeting this challenge. In particular, we aim to better understand the role of Certified Nurse Midwives in resident education and quantify some areas of OB curricula that successfully train residents who go on to practice obstetrics in their careers. We will review the results of this survey and hope to generate a discussion with the audience about this important issue.

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 10:00 – 10:20AM

Presenter: Lionel Varela, MD

Lewistown Rural Family Medicine Residency Program

Submission Category: Resident Presentation

Case Presentation

Diagnosis and Management of Cannabis Hyperemesis Syndrome: A Case Report

Authors: Lionel Varela, MD; Mandy Maneval, MD, PhD; Sireesha Vemuri-Reddy, MD; Swetha Parvataneni, MD

Abstract:

Cannabis hyperemesis syndrome (CHS) is a clinical syndrome associated with prolonged and regular cannabis use. Cannabis is the most commonly abused illicit drug in the United States. With the legalization of cannabis in certain states, cannabis use has increased exponentially, along with the disorders associated with its use. CHS is characterized by recurrent episodes of intractable nausea and vomiting. Given the overlap with other medical conditions and the frequent delay in diagnosis, finding an effective anti-emetic regimen for symptomatic control of CHS can be challenging. We review the diagnosis and management of CHS and report a case study where aprepitant (Emend) was successfully used as an anti-emetic in the treatment of CHS when all other common anti-emetics failed.

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 3:00 – 3:20PM

Presenters: Courtney Humphrey, MD, and Renata Carneiro, PhD LMFT

St. Luke's University Health Network

Submission Category: Faculty Presentation

Case Presentation

A S.T.A.R Team Approach to Functional Neurological Disorder

Authors: Courtney Humphrey, MD and Renata Carneiro, PhD LMFT

Abstract:

Statement of Purpose: This case study offers an understanding of how multidisciplinary team members can work together to increase treatment compliance and health outcomes for patients suffering with chronic medical and psychological conditions.

Case Summary: A 16 year female (SB) has been a patient in our office for many years. Over the past 3.5 years, she has sought medical care on average eighty times. The majority of her visits were same day acute visits with different physicians for various vague somatic complaints. As she got older, the complaints evolved to include neurologic ailments. Yet, physical exam, laboratory, and EEG testing were normal. The multiple physician members on her treatment team were in agreement that her symptoms were psychogenic in nature. However, the patient and family were very hesitant to agree with such explanation. At the age of 16, SB's primary care physician recommended she restart therapy to help her deal with the frustration of her physical symptoms. Six weeks into psycho education and CBT SB started to acknowledge a mind-body connection. Alongside of CBT she established care with a new pediatric neurologist who reinforced prior findings and diagnosed her with conversion disorder secondary to psychological trauma, otherwise classified as Functional Neurological Disorder.

Conclusion/Implication: The challenges of such disorders are to diagnosis and effectively treat patients and their families. This case study offers an understanding of how multidisciplinary team members can create a medical home for patients. In this presentation, we will address how providers can create a S.T.A.R team where patients can surrender to the process of treatment, trust that providers will work together, acknowledge the interplay of emotional and physical symptoms and repeat the steps above as necessary to create a cohesive experience for patients and their families.

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 3:20 – 3:40PM

Presenter: Feroza Patel, DO, and Trajan Barrera, DO
Wellspan Good Samaritan Hospital Family Medicine Residency
Submission Category: Resident Presentation

Case Presentation

Look beyond the calf!

Atypical locations and presentations for Deep Vein Thrombosis (DVT), a case series.

Authors: Feroza Patel, DO1; Trajan Barrera, DO1; Erum Azhar E, MD, FACOG2; Khan MN, MD1; Abdul Waheed, MD FAAFP1 ; 1-WellSpan Good Samaritan Hospital Family Medicine Residency Program Lebanon, PA 2- Department of Obstetrics and Gynecology Maimonides Medical Center

Abstract:

Introduction DVT/ Venous thromboembolism (VTE) are not limited to the calf and lung. The coagulation/anticoagulation cascade can, and will, tip toward imbalance when the perfect storm of Virchow's triad (Venous stasis, Hypercoagulability, Vessel wall injury) are met, even in the most uncommon locations.

Cases: Our cases include a 45-year-old man with superior vena cava syndrome and an internal jugular DVT from multiple central lines. A recurrent upper extremity DVT in a 16-year-old girl on coumadin with stricture from cerebral palsy who required stenting of a vein. A 41-year-old weightlifter diagnosed with right brachial-vein DVT and recovered with appropriate anti-coagulation. A 30-year-old postpartum woman who checked out 6 hours after delivery against medical advice returned the next day and CT revealed a left ovarian vein thrombosis. Finally, a 31-year-old female with factor V deficiency and DVT of the common femoral and external iliac veins was sent home on heparin to warfarin bridge and returned ultimately with Phlegmasia Cerulea Dolens compartment syndrome of the veins.

Discussion: The common unifying thread among these cases as alluded to earlier are unique contributions of hypercoagulability, endothelial damage, and venous stasis the so-called Virchow's triad. Fortunately, standard treatment options for DVT treatment remain which include therapeutic levels of heparin or direct/indirect factor Xa inhibitors, fibrinolytics, or vitamin K antagonists. Surgical options must be weighed on a case by case basis.

Conclusion: Although a common mechanism to explain both typical and atypical varieties of DVT exist, a clinician must be able to think outside the box in order to consider both the most likely explanation but also be able to rule in or out a common pathology in an uncommon location. Once recognized, prompt treatment with attention to their overall stability must be considered. In case alternative treatments must be utilized.

PAFP Research Day 2020: Oral Presentation Abstract Directory

Time 3:40 - 4:00PM

Presenter: Alex Mathew, MD

Wellspan Good Samaritan Hospital

Submission Category: Resident Presentation

Community/Public Health

Knowledge, attitude, and practices of family medicine faculty regarding publication in "predatory" journals and factors associated with any significant differences

Authors: Alex Mathew, MD, Abdul Waheed MD, FAAFP 1, Erum Azhar MD, FACOG1,2

Abstract:

Introduction: Peer review is a well-recognized essential characteristic of scientific literature. Health care has seen tremendous growth in the number of peer-reviewed journals over the past 20 years. With the recent surge in open-source journals, numerous journals publish low quality work and have a dubious peer-review process; sometimes done solely for monetary gains. Since peer-reviewed journal publication is a way of recognition of academic and scholarly achievements in health care, it is important to know how these predatory journals are affecting academia. There is a scarcity of literature detailing the behavior of faculty regarding their publication practices. This study is a KAP (Knowledge, Attitude, and Practices) survey to explore this among faculty in family medicine residency programs and factors associated with significant differences among them.

Methods: This survey utilizes a cross-sectional study design. It uses a self-administer survey modified from a well-cited KAP survey from Vodipovic et al. It is being emailed using SurveyMonkey to anonymous responses from family medicine faculty. It aims to have a sample size of 384 faculty to detect a statistically significant response at a 95% confidence interval, 80% power, and alpha of 0.05. This was calculated using Stat Calc for Epi Info downloaded from the Center for Disease Control keeping the total population as unknown and expected outcome to have a 50% probability with a 5% margin of error.

Results: The survey is currently in progress. The authors predict that many residency faculty members have suboptimal knowledge with uninformed practices regarding publication in predatory journals. It is expected that faculty with prior academic training like fellowship or advanced research or public health-related degrees might better knowledge and informed attitude and practices towards publication in predatory journals.

Conclusions: The results of this survey will have potential implications for faculty development and policy development.