



2022 Abstract Competition  
September 29, 2022 via Zoom

## Resident Abstracts

Categories accepted:

Basic Research  
Clinical Research  
Clinical Vignette  
Quality Improvement/Patient Safety  
High Value Cost- Conscious Care



grew 1 out of 2 positive *Pseudomonas aeruginosa*. The patient was empirically treated with IV Cefepime



## Resident Abstract 3

Category Submitting for: Clinical Vignette

**Abstract Title** New onset left bundle branch block – activate the Cath lab, or not?

### Abstract Text

An 84 year old male was transferred to the hospital overnight for chronic obstructive pulmonary disease exacerbation and pneumonia with an extensive past medical history including: hypertension, atrial fibrillation, nonobstructive coronary artery disease (Cath 2016), heart failure with reduced ejection fraction (EF 25-30%), carotid artery stenosis status-post stent, abdominal aortic aneurysm, diabetes, prostate cancer and chronic kidney disease. In the morning, the team was called for EKG changes on telemetry; the patient was in atrial fibrillation with rapid ventricular response and new onset left bundle branch block (LBBB). The patient had no chest pain, but endorsed shortness of breath. He was afebrile, heart rate 110-130s with normal respiratory rate, saturating well on room air, blood pressure 130/70s. The question: activate the Cath lab, or not?

Patients with acute ischemic symptoms and new onset left bundle branch block pose a unique diagnostic challenge. These patients are less likely to have an acute culprit lesion on cardiac catheterization but are also a high risk patient population. The 2004 and 2007 American College of Cardiology (ACC) and the American Heart Association (AHA) STEMI guidelines recommended reperfusion therapy for patients with ischemic symptoms and new or presumed new LBBB. The 2012 European Society of Cardiology STEMI guidelines recommend early percutaneous coronary intervention for clinical presentation of STEMI and new LBBB. However, in 2013 the ACC/AHA STEMI guidelines removed the specific recommendation for reperfusion therapy for patients with new LBBB. This change may reduce the incidence of false activations of Cath lab and inappropriate fibrinolytic therapy. However, withholding appropriate reperfusion therapy in patients with true coronary artery occlusion has potential for increased morbidity and mortality.

Application of Sgarbossa's criteria is the most widely accepted tool to aid in diagnosis of MI in the presence of LBBB. Sgarbossa et al. identified three EKG criteria that may improve diagnosis of MI in patients with LBBB: ST-segment depression in leads V1, V2, and V3; ST-segment elevation in leads V5 and V6; and a Q wave in leads V1, V2, and V3. Electrocardiogram are defined as the presence of more than one waveform change with the same polarity, or in the same direction. If Sgarbossa's criteria are not met, serial cardiac biomarkers or echocardiogram is indicated.

In this case, cardiology was consulted and they recommended not activating the Cath lab. Troponin did not trend up and an echocardiogram revealed further reduction in ejection fraction, EF 15-20%, and a dyskinetic apex with best preserved function at the bases suggestive of stress induced cardiomyopathy.

## Resident Abstract 4

**Category Submitting for:** Clinical Vignette

**Abstract Title** Evaluation of Hematochezia: Many Factors(V) to consider

### **Abstract Text**

onset nausea with vomiting, but no diarrhea. She had a prior instance of abdominal pain one year prior. A colonoscopy was performed at that time and, per the patient, colitis of uncertain etiology was diagnosed.

thrombosis. Physicians should consider portal hypertension and the development of portosystemic shunts as a cause of rectal bleeding in patients that have pro-coagulant risk factors.





## **Resident Abstract 6**

**Category Submitting for:** Clinical Vignette

**Abstract Title** Extramedullary Ependymoma: A Case Report

**Abstract Text**

Extramedullary Ependymoma: A Case Report

Introduction:

Ependymomas are a group of glial tumors that typically arise within or adjacent to the ependymal lining of the ventricular system. Several histologic subtypes exist including papillary, cellular, clear cell, and myxopapillary. Of these the myxopapillary subtype is the least common, representing only 13% of all ependymomas. Myxopapillary ependymomas are thought to arise from the glia of the filum terminale,

few individual case reports, Ependymomas are reported in patients with MEN1 Syndrome.

Conclusion: This case concludes that ependymomas are not only restricted to the brain and intramedullary spinal cord but can also present as an extramedullary spinal cord tumor along with MEN1 syndrome phenotype.

## Resident Abstract 7

**Category Submitting for:** Clinical Vignette

**Abstract Title** The Story of the Sticky STI

### **Abstract Text**

A 38 year-old woman from Sudan presented with acute altered mental status and fever of 39.2C. She was hypotensive, tachycardic, and had a lactate of 20. Initial evaluation did not reveal a focal source of infection – head, chest, and abdominal imaging were reassuring, UA was bland, and there was no evidence of skin or soft tissue infection. She was initiated on broad-spectrum antibiotics, intravenous fluids, and norepinephrine. At 26 hours, blood cultures grew *Neisseria gonorrhoea*. Antibiotics were narrowed to ceftriaxone. Our patient stabilized and her mental status cleared. Patient endorsed ankle and foot pain. Orthopedics was consulted but did not have a concern for a septic joint. Patient was HIV negative. A possible mitral valve vegetation was seen on transthoracic echocardiogram. Transesophageal echocardiogram revealed no definitive vegetations but did reveal mitral valve leaflet thickening. Our patient was treated with four weeks of cef triaxone in the setting of possible gonococcal endocarditis.

### **Learning Points:**

1. Understand the epidemiology and presentation of disseminated *N. gonorrhoea* infection
2. Recognize the relationship between *N. gonorrhoea* bacteremia and infective endocarditis
3. Understand the association of mitral valve leaflet thickening with endocarditis

*N. gonorrhoea* infections are commonly encountered by the internist. An estimated 600,000 cases occur each year, making it the second most common STI in the United States. Although most cases are localized to the urogenital system, disseminated infections occur in 1-3% of cases. Hematogenous spread of the bacteria occurs within 2-3 weeks of the inciting infection. The initial presentation of disseminated infections can be heterogenous, ranging from fevers and malaise to polyarthralgia, tenosynovitis, dermatitis, or rarely septic shock. Endocarditis is also a rare manifestation of disseminated gonococcal infections occurring in 1-2% of cases. The overall mortality rate of gonococcal endocarditis is 20%. The aortic valves are most affected and large vegetations are often seen on echocardiography. No discrete vegetations were seen.

## Resident Abstract 8

Category Submitting for: Clinical Vignette

**Abstract Title** Drug induced Hemolytic Anemia in patient with Spotted Fever Rickettsiosis

### Abstract Text

Spotted Fever Rickettsiosis (SFR) is an uncommon illness in Nebraska but requires prompt diagnosis and treatment. Improper treatment results in severe illness and complications including drug induced hemolytic anemia (DIHA).

A 32-year-old man with no past medical history presented to the emergency room complaining of an insect bite on his left deltoid obtained 4 days ago. Shortly after the bite, he developed localized erythema, fevers, and malaise. Rash then spread inward to his torso. Patient was initially diagnosed with cellulitis and treated with trimethoprim-sulfamethoxazole (TMP-SMX). Patient returned three days later complaining that his symptoms had gotten worse. He also reported yellowish discoloration of his skin. On exam, he was noted to have scleral icterus and a petechial rash on his left arm spreading down towards his chest. Labs were notable for white blood cell (WBC) count 18.1 K/uL, hemoglobin 10.6 g/dl, lactate dehydrogenase 750 U/L, haptoglobin <8 mg/dl, aspartate transaminase 115 U/L, alanine transaminase 149 U/L, total bilirubin 13.5 mg/dl, direct bilirubin 7.9 mg/dl. Repeat WBC count a day later increased to 26.1 K/uL and hemoglobin dropped to 4.6 g/dl. Direct antiglobulin test performed and was positive. Given high suspicion of DIHA, TMP-SMX was discontinued and patient was started on 80mg prednisone. Patient placed on broad spectrum antibiotics initially for suspicion of sepsis. However, with no improvement suspicion was raised for SFR. Patient was started on oral doxycycline. His symptoms improved and was discharged home on a seven-day course of 100mg doxycycline twice per day. Rocky Mountain Spotted Fever IgM Enzyme immunoassay test was obtained and later found positive at 1.64 index.

In 2010 the CDC coined the term SFR due to the inability to differentiate Rickettsia species on serological tests. Most recognized of the group is Rocky Mountain spotted fever. SFR are the most reported tick-borne diseases in the state of Nebraska. The Nebraska Department of Health and Human Services reports an increase in the median of cases over the last 5 years from 14 cases per year up to 26 annually on average. Symptoms typically start out nonspecific such as fever, headache, and gastrointestinal complaints. Rash is a common finding but may be absent in 10% of cases. Labs may reflect leukocytosis or leukopenia, thrombocytopenia, anemia, or elevated liver enzymes. The standard serologic test for diagnosis of SFR is the indirect immunofluorescence antibody (IFA) assay for immunoglobulin G (IgG) using R. rickettsii antigen. Doxycycline is the drug of choice and is recommended in patients of all ages, including children less than 8 years of age. Delay in treatment may result in mortality, therefore treatment is required prior to confirmatory testing. This case illustrates importance of prompt diagnosis of SFR, treatment and adverse effects of misdiagnosis.

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## **Resident Abstract 10**

**Category Submitting for:** Clinical Vignette

**Abstract Title** A Plume of Foul Dust: An Unusual Case of Pneumonia

### **Abstract Text**

Introduction: Community-acquired pneumonia (CAP) is a common diagnosis for internists. Common causes include viruses and typical bacteria such as *Streptococcus pneumoniae*. However, it is i

## Resident Abstract 11

Category Submitting for: Clinical Vignette

**Abstract Title** Tularemia Peritonitis: A Rare Presentation of a Rare Disease

**Abstract Text**

Tularemia Peritonitis: A Rare Presentation of a Rare Disease  
Joshua Warner MD, Henry Reed MD

Introduction: Tularemia is an infectious disease caused by the bacterium *Francisella tularensis*, a naturally occurring pathogen most commonly found in rabbits and small rodents. Disease manifestations differ based on the portal of entry: Humans are most often infected via the skin, which typically results in lymphadenopathy with or without overlying skin ulceration. Though tularemia has a wide range of uncommon presentations, peritonitis is exceptionally rare.

Case Description: A 66-year-old male with end-stage renal disease on peritoneal dialysis presented in May to the emergency department with abdominal pain, fever, and malaise. He reported recent removal of two engorged ticks from his lower abdomen several days prior. Physical exam revealed a bulge in his left groin, without overlying rash or ulceration. The patient met SIRS criteria for sepsis, with fevers reaching 102.3 F and tachycardia. Spontaneous bacterial peritonitis was suspected; blood and peritoneal fluid cultures were drawn. The patient was empirically treated with IV ceftriaxone, which resulted in fever resolution and symptom alleviation by hospital day three. Oral doxycycline was prescribed for a two-week course of continued empiric therapy. No organisms were isolated from his cultures.

His symptoms quickly returned and the patient visited an urgent care clinic twice before returning to the ED one month post-discharge. Peritoneal fluid analysis revealed a neutrophil count of 168 cells/uL, solidifying a diagnosis of bacterial peritonitis. Broad spectrum empiric coverage was started with intraperitoneal vancomycin and ceftazidime, given as an initial loading dose and then as maintenance





## **Resident Abstract 13**

**Category Submitting for:** Clinical Vignette

**Abstract Title** Improve your practice: recognize calciphylaxis!

### **Abstract Text**

Case Description:

A 68-year-

correcting risk

## Resident Abstract 14

Category Submitting for: Clinical Vignette

**Abstract Title** When Antibiotics Go Bad

**Abstract Text**

An 82-year-old female presented to the Emergency Department with dysphagia, confusion, and lethargy. Labs were remarkable for neutropenia (WBC 0.9, ANC 0) and anemia (hemoglobin 9). Head CT did not show any signs of acute stroke.

Additional history includes a diagnosis of culture negative, presumed bacterial meningitis about four months prior. She was treated with vancomycin and ceftriaxone, and was discharged after clinically improving. Two months later, she presented with headaches. MRI showed three rim enhancing lesions including the left anterior temporal lobe and left cerebellum. There was also evidence of left sphenoid sinus opacification with dehiscence. She underwent sinus washout with ENT, followed by aspiration of the abscess by Neurosurgery. Sinus cultures returned positive for *Pseudomonas aeruginosa* so she was started on cefepime. A few days later, she became lethargic. She was found to be in non-convulsive status epilepticus, suspected to be from cefepime neurotoxicity. She was transitioned to

## **Resident Abstract 15**

**Category Submitting for:** Clinical Vignette

**Abstract Title** Simple Ankle Fractures? Think Again.

**Abstract Text**

Simple Ankle Fractures? Think Again.

Robertson, S MD, Anderson, N MD; University of Nebraska Medical Center, Omaha, NE

Case Discussion:

A 57 year-old female presented to the emergency department with lower extremity pain found to have



Resident



## Resident Abstract 18

Category Submitting for: Clinical Vignette





## Resident Abstract

## Resident Abstract 21

Category Submitting for: Clinical Vignette

**Abstract Title** Recurrence of Gastrointestinal Stromal Tumor After Surgical Resection

### **Abstract Text**

Gastrointestinal stromal tumor (GIST) is the most common mesenchymal tumor of the gastrointestinal tract. It is most frequently located in the stomach, and the first-line curative treatment is surgical resection. However, there is still a significant rate of recurrence after surgery. This report presents a case of a 76-year-old female who had a recurrence of GIST in her liver 12 years after surgical resection of the primary GIST in her stomach. 5 years after the surgery, CT abdomen did not detect any new tumors. 10 years after the surgery, abdominal ultrasound only showed a liver lesion that biopsy revealed to be NASH. The recurrent GIST was found outside of the standard 5-year imaging follow-up of surgical resection. We

## Resident Abstract 22

Category Submitting for: Clinical Vignette

Abstract Title An Abnormal Presentation of Renal Cell Carcinoma

### Abstract Text

#### Introduction

Only 0.2-0.7% of metastatic cancers will affect the stomach. Renal cell carcinoma (RCC) most commonly metastasizes to the lung, bone, and liver. With metastatic RCC to the GI tract, the duodenum is the most frequent location whereas the rectum and stomach are much less frequent, occurring in only 0.2-0.7% of cases. In these patients, 81.8% will present with GI bleeding as their primary symptom. Because it usually spreads via peritoneal seeding, presentation can be delayed.

## Resident Abstract 23

Category Submitting for: Clinical Vignette

Abstract Title

or deposition. Autoimmune paraneoplastic syndrome and administration of granulocyte colony-stimulating factor (G-CSF) in MDS patients for neutropenia are the two causes reported to manifest pseudogout in MDS.