ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #1 Category: Clinical Vignette

Program: Ascension Genesys Hospital
Program Director: Barbara Pawlaczyk, MD
Presenter: Ziauddin Syed
Additional Authors: Mohammad Muhsin Chisti, MD FACP

Disseminated Intravascular Coagulation and Coombs Negative Hemolytic Anemia Caused by Disseminated Cytomegalovirus Infection

Introduction: Disseminated intravascular coagulation (DIC) and non-immune hemolytic anemia (NIHA) are rare complications of cytomegalovirus (CMV) infection. We report a case where both phenomena occurred simultaneously in conjunction with CMV encephalitis.

Case: A 64-year-old female with history of end-stage renal disease status post renal re-transplantation on immunosuppressive therapy presented with epigastric pain and mild thrombocytopenia which continued to worsen. Further workup revealed DIC with elevated prothrombin time, elevated D-dimer, and low fibrinogen. Workup also demonstrated coombs negative NIHA with schistocytes, low haptoglobin, elevated LDH, elevated total and indirect bilirubin, and elevated plasma hemoglobin. She proceeded to exhibit acute encephalopathy and underwent a lumbar puncture which was positive for CMV by PCR. Patient was started on ganciclovir after immunosuppressive therapy was held. She also received supportive measures including transfusions with blood, platelets, fresh frozen plasma, and cryoprecipitate. CMV viral load consistently decreased with treatment and DIC subsequently resolved. However, haptoglobin remained low and LDH continued to be elevated indicating persistent hemolysis despite clinical improvement and resolution of DIC. Patient returned to baseline mentation and was discharged home on valganciclovir.

Discussion: DIC and NIHA are life-threatening and require prompt recognition and treatment of the underlying cause. Clinicians should consider the possibility of CMV as an underlying cause of DIC and NIHA. This case demonstrates that early treatment with ganciclovir along with supportive measures can be effective in treating severe hematological complications of disseminated CMV infections. Increasing awareness of this condition may help establish the true incidence, proper diagnosis, and management plan.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #2 Category: Clinical Vignette

Program: Ascension Macomb Hospital
Program Director: Devorah LaVan, DO
Presenter: Sean Dawes
Additional Authors: Jared Frisby DO, Christopher Webster DO, Javier Aguilar-Aragon MD

Chronic Interstitial Nephritis Due to Acute Retroviral Syndrome

Acute interstitial nephritis (AIN) is a hypersensitivity reaction to noxious substances resulting in kidney injury from inflammatory cell infiltration. AIN is elicited by drugs, chronic infections or immunological etiologies. Chronic interstitial nephritis (CIN) is the result of prolonged exposure to noxious substances which results in progressive renal failure. We present a case of CIN due to acute retroviral syndrome in the absence of other etiologies.

A 72 year old male presented to the emergency room with progressive dyspnea for 6 weeks. Patient's vitals and orthostatic blood pressure were within normal limits. Initial laboratory workup an acute kidney injury (6 months ago creatinine 0.9, now 2.17). Physical exam revealed bilateral paratracheal lymph nodes and mild splenomegaly. Bilateral hilar lymphadenopathy was seen on CT chest. Patient was found to be HIV positive while working up his lymphadenopathy. His CD4 count was 550. His creatinine failed to improve with IV hydration. Glomerulonephritis serologies were negative. Patient underwent a renal biopsy which revealed chronic interstitial nephritis. In the absence of chronic medication usage or other chronic infections, his chronic interstitial nephritis was likely due to an acute retroviral syndrome. This was supported when his lymphadenopathy and creatinine improved upon follow up on 1 year of ART.

This is an interesting case as HIV is not a typical cause of interstitial nephritis. This was determined after an extensive view of patient’s medication history and evaluation for chronic infections. To our knowledge, there are no other documented cases of HIV alone causing CIN.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #3 Category: Clinical Vignette

Program: Ascension Macomb Hospital
Program Director: Devorah LaVan, DO
Presenter: Jared Frisby
Additional Authors: Jared Frisby, DO, Sean Dawes DO, Kinal Panel DO. Christopher Webster DO

Atypical Hemolytic Uremic Syndrome Presenting as Chronic Kidney Disease

Thrombotic Microangiopathy (TMA) is typically the result of ADAMTS13 deficiencies or shiga toxin producing bacteria. Patients with TMA typically present with acute renal failure, thrombocytopenia and microangiopathic anemia. Atypical hemolytic uremic syndrome (HUS) is a rare TMA caused by loss of complement regulation. We present a case of atypical HUS without the typical presentation of TMA.

A 47 year old female presented to our nephrology clinic for chronic kidney disease management. Vitals were significant for hypertension, BP 150/90. Physical exam was significant for bilateral lower extremity edema. Initial lab work revealed a creatinine of 2.0-2.2 (GFR: 25-28), microhematuria and protein/urine creatinine ratio of 2.1g. Dysmorphic erythrocytes were found on urine microscopy, prompting evaluation for glomerulonephritis. Her serology workup revealed a mildly decreased C3. Renal biopsy revealed findings consistent with chronic thrombotic microangiopathy without active thrombosis. This raised concern for an indolent variant of atypical HUS. This was confirmed with complement regulatory protein gene testing, revealing a novel c-terminus mutation of Factor H. This resulted in a mild but clinically significant increase of C3 activation on self-cells. She was started on eculizumab which has continued to preserve her renal function.

This case study illustrates the complexity of TMA syndromes as even a small loss of complement regulation can result in atypical HUS. In the appropriate setting, atypical HUS should be considered without thrombocytopenia and microangiopathic anemia. This allowed the patient to receive the appropriate treatment and avoid further loss of renal function.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #4 Category: Clinical Vignette

Program: Ascension Macomb Hospital
Program Director: Devorah LaVan, DO
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Additional Authors: Dr. Kinal Patel, D.O. PGY-3; Dr. Tarik Hadid, M.D.

A Rare Case of Blastoid Variant Mantle Cell Lymphoma

Mantle Cell Lymphoma (MCL) is a rare subtype of B-cell Non-Hodgkin's Lymphoma (NHL) with various morphologies that carries a progressive and deleterious course. The blastoid variant of MCL involves a more aggressive prognosis, constituting 10-15% of MCL cases (2). Pulmonary pleural involvement in the blastoid variant of mantle cell lymphoma is a rare manifestation. We present a case of a 68-year-old male who presented with exertional dyspnea, night sweats, and unintentional weight loss. Labs were remarkable for CBC revealing new onset anemia, elevated LDH, and peripheral smear demonstrating 15% immature hematopoietic cells. Further studies with a bone marrow biopsy and fluorescence in situ hybridization (FISH) analysis revealed CD20+/CD10+ large B cell lymphoma with cytogentic impression indicating 47% of nuclei with (11;14) translocation and cyclin-D1 positivity. Imaging revealed a mass-like pleural thickening in the right lung apex and multiple, prominent periaortic and mesenteric lymphadenopathy. The case was ultimately diagnosed as a blastoid variant of MCL based on bone marrow biopsy, flow cytometry, FISH analysis, and CT guided biopsy of the lung. Many studies thus far indicate that pulmonary involvement with MCL can occur in the setting of an MCL recurrence or one to years after a diagnosis of MCL. Thus, it is quite rare for pulmonary involvement to be established upon an initial diagnosis of MCL, especially the blastoid variant. Establishing a definitive diagnosis can be difficult but should not be delayed in patients with new onset anemia and elevated LDH as MCL holds a poor prognosis at best.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #5 Category: Clinical Vignette

Program: Ascension Providence Hospital
Program Director: Robert Bloom, MD, FACP
Presenter: Evan Asper
Additional Authors: Ala Shuker M.D.

Shh, Silent MI: Herpes Can't Keep Secrets

It has been well established that herpes zoster can present at times of stress. In a 2017 meta-analysis, patients are at increased risk of stroke and myocardial infarction up to 3 months to over a year post-zoster infection. I present a case of a 90 year old female with an otherwise silent MI found to have active herpes zoster infection.

Patient, with a history of scoliosis, degenerative disc disease with chronic back pain, hypertension, and chronic kidney disease, presented for right-sided back pain that woke her from sleep. Patient denied any chest pain or shortness of breath with these symptoms. Physical exam was benign without structural deformity, integumentary changes, or unequal pulses. Patient's initial EKG was without ST-T changes. Initial labwork consistent with CKD and a normal troponin. Patient underwent X-ray and MRI of the thoracic spine which showed degenerative disease. Repeat troponin levels were elevated at 0.77 and 0.82. Active zoster was noted on back the following morning. EKG showed new T wave inversions V2-V6 with 1mm ST elevation V2-V4. ECHO was performed which showed new regional hypokinesis of the anteroseptal, anterior, and anterolateral wall.

It's difficult to tell whether zoster came first, or if a silent MI triggered it. This case illustrates the importance of immediately ruling out MI at the onset of a zoster flare in a patient with risk factors. It shows that these two diagnoses can present within hours of onset from each other, and education of both patients and physicians is necessary.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #6 Category:

Program: Ascension Providence Hospital
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #7 Category:

Program: Ascension Providence Hospital
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #8 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Saif Affas
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Mesenteric Leiomyosarcoma: A Case Report

Mesenteric leiomyosarcoma is a very rare mesenteric solid tumor, usually misdiagnosed as a gastrointestinal stromal tumor (GIST). Leiomyosarcoma typically presents with nausea, vomiting, weight loss, and a palpable mass. Surgical resection is the treatment of choice for this tumor. Leiomyosarcoma has a less favorable outcome compared to GIST.

Case Report: A 68-year-old female with a history of hypertension, diabetes mellitus and latent tuberculosis presented with decreased oral intake secondary to nausea, vomiting, and diarrhea for two days. She had lost 10-pounds over the previous two months. On examination, there was mild right upper quadrant tenderness. Computed tomography (CT) with contrast revealed a large right-sided solid mesenteric tumor, causing extrinsic compression of the proximal and midportion of the right ureter with hydronephrosis. CT guided biopsy showed smooth muscle neoplasm consistent with leiomyosarcoma. A right ureteric stent was inserted, followed by explorative laparotomy. The tumor was encasing the right ureter. Excision of the tumor with the midportion of the right ureter was done with anastomosis of the upper and lower portion of the right ureter. The patient improved postoperatively and after six months there is no recurrence.

Conclusion: Leiomyosarcoma is a very rare mesenchymal tumor of the gut. A biopsy is mandatory to differentiate it from GIST. Nausea and vomiting with weight loss are the usual presentation, as the tumor is often extramural without mechanical obstruction of the gut. Treatment usually is by surgical resection with frequent imaging follow-up

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #9 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Khalid Alfares
Additional Authors: Khalid Alfares, MD; Safa Maki, MD, MPH; Paul Fozo, MD, FACP
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Streptococcus agalactiae Infective Endocarditis Following an Elective Abortion

Streptococcus agalactiae (also known as group B streptococcus, GBS) is an uncommon cause of right-sided endocarditis, nonetheless, it is a life-threatening condition with 40% mortality. GBS colonizes the cervical canal and has been described as a cause of endocarditis following obstetric procedures in 3-14/100,000 deliveries and rarely after elective abortions.

Case: A 25 year old female with a history of an elective abortion a month ago presented with a three week history of dyspnea associated with yellow blood-tinged sputum, pleuritic chest pain and migratory arthralgia. Social history was unremarkable. Physical examination showed a heart rate of 130, respiratory rate of 30/minute, decreased air-entry with inspiratory crackles in both lung-fields, and left wrist and bilateral ankle tenderness and stiffness. Labs were significant for WBC (22 K/mcL), lactic acid (3.3 mmol/L) and procalcitonin (1.53 ng/mL). CTA scan of the chest was negative for pulmonary embolism but revealed bilateral pulmonary infiltrates. Blood cultures grew GBS that was treated with ceftriaxone and vancomycin. TTE was unremarkable. There was no clinical improvement by day 6, we started empiric solumedrol awaiting results of an autoimmune workup and the patient had dramatic improvement in symptoms. Subsequent TEE identified tricuspid valve vegetations of 20.0, 7.6 and 3.0 mm. Vancomycin was discontinued, steroids tapered and ceftriaxone continued for six weeks.

Discussion:
Our case brings to light tricuspid endocarditis presenting with septic pulmonary emboli and nonspecific polyarthritis. It is crucial to recognize gynecological procedures as a risk factor for GBS endocarditis, given the severity of the disease.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #10 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
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Systemic Sclerosis Induced Chronic Myocarditis: A Rare Presentation of Cardiac Involvement

Introduction: Cardiac involvement is common in systemic sclerosis (SSc) but clinically apparent disease is relatively uncommon. Only a minority of those with cardiac involvement develop myo-carditis. Here, we highlight a rare case of chronic myocarditis in a young patient with SSc .

Case Presentation: 31 year- old woman with a history of SSc presented with abdominal pain and vomiting due to ileus. During the course of her hospitalization, she developed atypical chest pain. EKG was unremarkable, but troponin was elevated (0.10). Echo showed reduced ejection frac-tion(EF) of 30-35 %. The patient's records revealed chronically elevated troponin, and a history of cardiac catheterization twice, that were both unremarkable. Given elevated troponin and re-duced EF, there was a strong suspicion for myocarditis. However, evaluation with cardiac MRI was not feasible due to an implantable device placed for seizures disorder. Upon resolution of the symptoms, she was discharged home. She was started on goal-directed medical therapy, and was referred to rheumatology with plans to start on immune suppressive therapy.

Discussion: Although chronic myocarditis is rare, it is an important consideration in SSc patients presenting with elevated troponin. Our patient underwent cardiac catheterization twice for con-cern for ischemia. Cardiac MRI is a very sensitive tool which aids in diagnosing myocarditis. However, it wasn't feasible in our case, which made the diagnosis more challenging. Recognition of such an unusual presentation is important not only to spare patients invasive procedures, but to also initiate treatment in order to prevent organ damage.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #11 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
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Posterior Reversible Encephalopathy Syndrome Secondary to Erlotinib Use

Posterior reversible encephalopathy syndrome (PRES) is a clinico-radiological diagnosis consisting of nausea,vomiting,headaches and seizures in the setting of appropriate imaging findings. It has many causes including accelerated hypertension as well as chemotherapy agents such as cisplatin1 ,cytarabine2,gemcitabine3, rituximab4 and bevacizumab5. There is little data on reported cases of Erlotinib induced PRES.

Our patient is a 66 year old female with past medical history of metastatic adenocarcinoma of lung,atrial fibrillation, CVA who presented to the hospital with seizures. She presented with severe headache, nausea, vomiting and developed “twitching” of the arms which transitioned into generalized seizures soon after. On initial presentation the patient was found to be hypertensive, afebrile, with witnessed tonic-clonic seizure en route to the hospital. On physical exam she was postictal but without obvious neurological deficits. She was treated as Status epilepticus and hypertensive emergency. Initial labs were unremarkable and subsequent CT and MRI were negative for acute CVA, EEG was negative for ictal/interictal forms. Interestingly enough MRI findings did show T2 flair in infra/supratentorial areas suggestive of Limbic encephalitis versus PRES. Due to lack of fever lumbar puncture was not pursued. Erlotinib was felt to be a cause of her symptoms and was withheld. In time the patient’s confusion and hypertension improved with return to baseline over 5 days.

One similar case was reported of Gemcitabine and Erlotinib induced PRES6 in The Oncologist. Although the authors did agree that Gemcitabine was a causative factor we can not underestimate the confounding effect of erlotinib therapy in such patients.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #12 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Zahra Alsultan
Additional Authors: Zahra Alsultan, MD

Vitamin B12 Deficiency Presenting as Severe Hemolytic Anemia

Introduction: Hemolytic anemia secondary to vitamin B12 deficiency is a rare. Clinical presentation may include life threatening hematologic manifestations, such as pancytopenia, severe anemia, or hemolysis. High clinical suspicion is needed for appropriate management.

Case: 44 year old female with history of hypothyroidism presented with complaints of worsening dyspnea and vomiting for one week. She reported palpitation, dark pigmentation around fingers, paresthesias, and dark urine. Before her presentation she visited an urgent care and her Hgb was 7.5 gm/dL, and was started on iron supplements. Her symptoms continued to progress. In the ED she was at 114 bpm, but otherwise hemodynamically stable. Physical examination revealed mucosal pallor and generalized weakness, with negative stool Guaiac test. Laboratory studies revealed pancytopenia, Hgb of 5.1, MCV of 113 and evidence of hemolysis, with normal iron studies. Peripheral blood smear reveled teardrop RBCs, and hyper-segmented neutrophils. DIC panel, direct Coomb's test and G6PD test were negative. Additional labs revealed Vitamin B12 <150, and positive anti-parietal antibodies. Patient was started on Vitamin B12 1000 mcg intramuscular injections. EGD was normal except for signs of campylobacter-like organism infection in the stomach, with negative H.pylori urease screen. Patient discharged on vitamin B12 replacement. She noted significant improvement with treatment.

Discussion: This case illustrates the potential of severe hemolytic anemia secondary to Vitamin B12 deficiency, and the importance of high clinical suspicion, accompanied by appropriate laboratory testing. Prompt recognition and awareness of this rare presentation is essential for appropriate therapy, and prevention of unnecessary diagnostic testing.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #13 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
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NAC of All Trades: Use of N-acetylcysteine in Cocaine-Induced Acute Liver Failure

Among patients with acute liver failure (ALF), drug-induced liver injury (DILI) presents a challenging clinical syndrome with limited therapeutic options. N-acetylcysteine (NAC) is a mainstay of treatment in acetaminophen-induced ALF. However, it has also been used with success in other toxic ingestions causing ALF. We present a case of ALF after acute cocaine ingestion with rapid recovery after administration of NAC.

A 58 year-old-male with a past medical history of chronic hepatitis C without cirrhosis and polysubstance abuse presented with acute psychosis. On arrival he was tachycardic but hemodynamically stable, with psychomotor agitation and fear delusions. He endorsed recent heavy cocaine ingestion. Initial labs demonstrated acute kidney injury, rhabdomyolysis and mild transaminitis; AST 59, ALT 56. Toxicology workup was positive for cocaine. The following day however, he developed fulminant hepatic failure, AST >7000, ALT 2,568 with progressive coagulopathy, INR 2.14, albumin 2.9, platelets 120. He was not a candidate for liver transplant, and decision was made to initiate intravenous NAC therapy. Transaminases rapidly normalized after three days of therapy.

NAC is well established as an antidote in acetaminophen ALF, yet its mechanisms are applicable to other forms of DILI as well. Cocaine hepatotoxicity has been reported in humans, and studies in mice suggest toxic metabolites play a critical role, much like acetaminophen ALF. We present a case of ALF secondary to cocaine ingestion with rapid recovery after IV NAC. NAC therapy has minimal adverse effects, and may be lifesaving in patients with ALF who are not candidates for liver transplantation.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #14 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Peter Boshara
Additional Authors: Elizabeth Bankstahl, MD, FACP

Not all Viruses are Created Equal: Influenza and Elevated Procalcitonin

Procalcitonin is a serum biomarker for distinguishing bacterial and viral lower respiratory tract infections (LRTIs). With higher specificity for bacterial infections, compared to known inflammatory markers, it's been shown to reduce unnecessary antibiotic prescribing by 25-50 percent. Although false positives can occur, influenza has not before been associated with elevated procalcitonin.

Case 1: A 67-year-old female presented with exertional dyspnea and nonproductive cough for a one day duration. She was febrile to 100.8F, tachycardic, tachypneic, with bibasilar diminished breath sounds on exam. Procalcitonin was elevated at 0.46 ng/mL Blood and sputum cultures were negative. A respiratory viral panel revealed influenza A 2009 H1N1. CT angiogram of the chest showed bibasilar ground glass opacities. The patient was admitted for sepsis and treated with oseltamivir monotherapy.

Case 2: A 60-year-old male presented with a 5-day history of nonproductive cough and fever. He was febrile to 102.5F and hypoxemic to 83% on room air. Exam revealed bilateral rhonchi. Laboratory work revealed a procalcitonin level of 0.28 ng/mL and influenza A on rapid testing. Blood and sputum cultures were negative. Chest X-ray showed bilateral infiltrates. The patient was admitted for influenza A pneumonia with subsequent improvement on oseltamivir without the need for antibiotics.

Discussion: Elevated procalcitonin is reported in chronic kidney disease, shock, trauma, immunocompromised states and certain malignancies. Although viral infection is not a known etiology of elevated procalcitonin, these two cases suggest that procalcitonin may have limitations in distinguishing bacterial LRTIs from influenza infection and its role in antimicrobial stewardship.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #15 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Dominic Brink
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Complications of Methamphetamine Intoxication via "Body Stuffing"

Methamphetamine is a sympathomimetic that causes a sense of euphoria, tachycardia, agitation, psychosis and hyperthermia. They typical route of administration is via inhalation. However, "body stuffers" are increasingly prevalent, in which they intentionally ingest the substance to avoid capture by police.

A 20-year-old male presented after ingesting orally 2 grams of methamphetamine. He then ingested an unknown amount of prazosin because he was feeling palpitations. He then presented to an outside hospital obtunded and hypotensive. He was intubated for airway protection and transferred to our facility. He was tachycardic and hypertensive on arrival. He then developed significant rhabdomyolysis and went into multi-organ failure, including anuric AKI and severe liver failure. He was initially started on hemodialysis, however had to be put on continuous renal replacement therapy intermittently due to hypotension. His liver failure and rhabdomyolysis initially improved after a few days but worsened significantly, and then required resumption of hemodialysis. He was extubated after 20 days only to be reintubated one day later. He remains intubated at this time. His ICU course was complicated by sepsis due to Clostridium difficile infection, as well as intermittent atrial flutter.

Due to the increase in illicit methamphetamine usage, it is vital that the modern clinician be aware of the symptoms of methamphetamine intoxication and how to treat them. In this case, it was known that the patient ingested the substance, but knowing the signs can help diagnose and treat these patients early and hopefully improve outcomes.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #16 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Benjamin Huber
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An Unusual Case of Ogilve's Syndrome Secondary to Urinary Tract Infection

Colonic pseudo-obstruction, also known as Ogilve's syndrome, is an uncommon sequalae of severe medical or surgical disease such as cardiothoracic or orthopedic surgeries, sepsis, pneumonia and myocardial infarction. The syndrome is characterized by abdominal distension, nausea, vomiting and cessation of bowel function in the setting of severe disease. The syndrome carries a high mortality, especially in the setting of perforation, which can be as high as 40%.

An 83 year old female presented for evaluation of altered mental status and hypoxia, and subsequently was found to have a urinary tract infection and dilated loops of large bowel with 1L of urinary retention. Foley catheter was placed and cultures were obtained. She was started on ceftriaxone. Urine cultures grew Citrobacter freundii and Klebsiella pneumoniae and antibiotics were deescalated to ciprofloxacin. On the third hospital day the patient became hypercapnic from the loops of bowel pushing on her diaphragm and was intubated. She was extubated and a rectal tube was placed. Gradually, with resolution of the patient's urinary retention and infection, her abdominal distension resolved and bowel function returned. She was discharged from the hospital on the eighth day to subacute rehab with two weeks of antibiotics.

This case illustrates an unusual case of Ogilvie's syndrome secondary to a urinary tract infection, an uncommon occurrence with few cases reported in the literature. It also illustrates the importance of recognizing the condition as an important cause of morbidity and mortality, even in mild cases of Ogilve's syndrome.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #17 Category: Clinical Vignette

Program: Ascension St. John Hospital
Program Director: Raymond Hilu, MD, FACP
Presenter: Yosef Huber
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H1N1 Influenza Associated with Massive Rhabdomyolysis and Renal Failure

Acute viral infections have been associated with rhabdomyolysis. In this case a physically fit male with H1N1 influenza developed massive rhabdomyolysis which resulted in liver injury and kidney failure requiring hemodialysis.

Case: A 25-year-old male with a past medical history of Hirschsprung disease presented to the emergency department for myalgias, productive cough, decreased appetite and congestion for the past 4 days. Another member of the household tested positive for influenza that same day. The patient was vitally stable and physical exam was nonfocal. He was subsequently discharged home with only ibuprofen for body aches as he was outside the oseltamivir (Tamiflu) window. He returned to the emergency department three days later with similar, albeit more severe complaints, however now he was anuric and bedridden from weakness. His initial labs demonstrated a creatinine of 8.9, potassium 6.3, calcium 5.2, phosphorus 10.5, AST 3491, ALT 666, CPK 1.3 million. The patient received daily hemodialysis and two days later his CPK was 800,000. On the third day of admission respiratory viral panel was positive for Influenza H1N1 and CPK spiked to 2.55 million. After an 11-day hospital course, the patient was discharged home with thrice weekly hemodialysis. One month later, hemodialysis concluded as his renal function returned to baseline.

Conclusion: Our case demonstrates a rare outcome for influenza, but it highlights the morbidity that influenza carries even in a young, healthy, and physically fit patient.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #18 Category: Clinical Vignette

Program: Beaumont Hospital – Dearborn
Program Director: Ruaa Elteriefi, MD, FACP
Presenter: kadhim Al-Banaa
Additional Authors: Alsadiq, Al hillan, MD; Khoury, John, MD; Momin, Feroze, MD.

When the Guidelines Directed Surveillance Fails! A Case of Late Recurrence of Colon Cancer After Curative Treatment

Colorectal cancer is the 4th most frequently diagnosed cancer and the 2nd leading cause of cancer death in the United States. Despite a potentially curative surgery, 25% to 40% will develop a tumor recurrence. Most recurrences occur within five years. Data about late recurrence are rare. The current recommendations for follow-up surveillance include a combination of history and physical examination, laboratory evaluation, imaging, and colonoscopy. Except for colonoscopy, other methods of surveillance continue for five years after curative operation only.

We present a case of 70-year-old female with a history of Stage II adenocarcinoma of the colon that underwent successful curative surgical resection of the descending colon 12 years ago. She underwent guidelines directed follow-up surveillance with cancer embryonic antigen (CEA) measurement and CT scan for five years after surgery. Follow up colonoscopy was continued for 12 years, the most recent one done 4 months prior to her presentation. All of her investigations showed no evidence of recurrence until she presented with blood in stool and was found to have an omental mass on Imaging, her CEA was high and her biopsy result was consistent for recurrent metastatic colon adenocarcinoma.

As repeated surveillance colonoscopy failed to detect colon cancer recurrence in our patient, and Given that both CEA measurement and Imaging studies were clearly indicative of colon cancer recurrence at the time of diagnosis, we would argue that continuing CEA measurement and Imaging studies for longer durations than what guidelines suggested, can detected the recurrence when colonoscopy fails.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #19 Category: Clinical Vignette

Program: Beaumont Hospital – Dearborn
Program Director: Ruaa Elteriefi, MD, FACP
Presenter: Rabia Bangash
Additional Authors: Ahmed Hashim, MD, Jonathan Zimmerman, MD, Louis Torregrosa, MD, Rajiv John ,MD._

Diagnosing Rheumatoid Arthritis the Hard Way!

Introduction: Pleuritis is the most common intrathoracic manifestation of Rheumatoid Arthritis (RA). Pleural effusions occur only in 2-3% of RA patients. It may be the first manifestation of the disease in a previously undiagnosed case of RA.

Case Description: A 60 year old male with a past medical history of tendonitis, COPD was admitted after a fall. His rib xray incidentally showed a moderate sized left sided pleural effusion. CT chest showed multiple pleural based pulmonary nodules and a cavity in the left upper lobe. Pleural fluid analysis revealed a cloudy alkaline exudate. Tuberculosis (TB), HIV, and fungal causes were ruled out with fluid analyses and antigen specific tests. Serum rheumatoid factor level was 505, and anti-CCP was < 15. Biopsy of the lung nodule showed necrotizing granuloma and pleural biopsy showed pleural fibrosis. A rheumatologist was consulted who diagnosed rheumatoid arthritis using the 2010 ACR criteria for RA. He received a three-week course of antibiotics for suspected empyema and was discharged home on prednisone 20 mg daily. He was started on Disease Modifying Anti-Rheumatic Drugs by his Rheumatologist upon outpatient follow up.

Clinical Significance and Discussion: Rheumatoid pleuritis is a disease of middle-aged men with RA. The pleural fluid is exudative and mostly turbid or cloudy in appearance. A low glucose content of < 30mg/100 ml in non-purulent pleural fluid with negative Gram stains and a negative cytology for malignant cells is highly suggestive of rheumatoid pleuritis. Pleural biopsy is required to rule out TB.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #20 Category: Clinical Vignette

Program: Beaumont Hospital – Dearborn
Program Director: Ruaa Elteriefi, MD, FACP
Presenter: Heba Habbal
Additional Authors: Heba Habbal, MD; Tooba Rehman, MD; Hammam Shereef, MD; Mahad Ahmed, MD; Hafsa Parpia, MD; Ruaa Elteriefi, MD; Rajiv John, MD

Henoch-Schönlein Purpura (HSP): A Childhood Disease in an Adult

Introduction:
Leukocytoclastic vasculitis, Henoch-Schönlein purpura (HSP) is a small vessel vasculitis associated with systemic IgA-immune deposits and vascular inflammation in childhood (90% of cases) and less commonly seen in adults. We present a rare case of HSP in an adult with severe renal and gastrointestinal involvement.

Case presentation:
A 56-year-old Caucasian female with a medical history of alcoholic liver cirrhosis presented with bilateral lower extremity rash for 3 weeks and generalized abdominal pain and hand swelling. She reported a URI 4 weeks prior. Exam revealed palpable non-blanchable purpura. Laboratory work revealed new renal failure with a creatinine of 3.6 mg/dl. Skin biopsy showed dermal inflammation and extravasation of erythrocytes. She was given IV methylprednisolone 125mg daily. Kidney function continued to worsen hence continuous renal replacement therapy was started. Kidney biopsy (delayed due to coagulopathy) showed IgA nephropathy. Her hospital course was complicated by terminal ileum perforation. Eventually, she developed DIC which is associated with severe HCP and passed away under hospice care.

Clinical Significance and Discussion:
Overall, this patient shared signs and symptoms of abdominal pain, purpuric rash, terminal ileum perforation, and rapid renal failure with other adult patients previously reported in the literature. However, unlike them, histopathology did not reveal leukocytoclastic vasculitis. Furthermore, HSP carries a relatively poor prognosis in adults compared to children, and even more so in the setting of multiple comorbidities. Combinations of pulse dose steroids, immunosuppressive agents, and plasmapheresis have yielded mixed results in small series, beckoning further investigation for an effective regimen.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #21 Category: Clinical Vignette

Program: Beaumont Hospital – Dearborn
Program Director: Ruaa Elteriefi, MD, FACP
Presenter: Ahmed Hashim
Additional Authors: Rabia Bangash MD, Fadi Abu Yasin MD, Faisal Musa MD

Kikuchi Fujimoto Disease- A Unique Masquerade!

Introduction: Kikuchi-Fujimoto Disease (KFD) is a rare, self-limiting disease that has a higher prevalence in Asians with some cases reported in the United States. The disease usually affects individuals during the third decade of life and shares features of serious illnesses such as lymphoma, infectious causes of lymphadenopathy including Tuberculosis and autoimmune conditions.

Case Description:
An 18-year-old African American female presented with high grade fever, sweating, and painful right-sided cervical lymphadenopathy for one week. On examination, she had tender and enlarged cervical and supraclavicular lymph nodes. Lab analysis showed leukopenia, thrombocytopenia and an elevated C-reactive protein. Erythrocyte sedimentation rate, antinuclear antibody, rheumatoid factor, and angiotensin converting enzyme were negative. HIV, hepatitis panel, rapid plasma reagin test, Cytomegalovirus IgM, Epstein Barr Virus IgM, Toxoplasma, Rubella, monospot tests were negative. CT scan of the neck showed right cervical, posterior triangle and supraclavicular adenopathy. Full body CT scan was normal. Given her clinical presentation, an infectious etiology was suspected and broad spectrum antibiotics were started empirically. Bicytopenia in the setting of lymphadenopathy raised the suspicion for lymphoma with bone marrow infiltration. Histological exam of lymph node upon excisional biopsy showed necrotizing histiocytic lymphadenitis – consistent with KFD. She was discharged on Naproxen and Tylenol with a referral to Rheumatology.

Clinical Significance and Discussion: KFD can mimic lymphoma, tuberculosis, and infectious lymphadenitis. Therefore, early recognition of this disease is essential in order to avoid unnecessary testing and inappropriate treatment. It should be kept in the differentials, especially in young patients, presenting with cervical lymphadenopathy.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #22 Category: Clinical Vignette

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Sara Aguinaga
Additional Authors: Paul Johnson MD

Disseminated Tuberculosis in a Renal Transplant Patient with Negative Screening

Tuberculin skin testing is a routine part of pre-transplant screening as tuberculosis is a common reactivated infection in immunosuppressed patients after solid organ transplantation. Several conditions including end stage renal disease can cause a false negative on TTD skin testing and does not exclude the disease in patients from endemic areas.

A 63 year old Asian-Indian male with a past medical history of ESRD status post recent deceased donor renal transplant presented to the hospital for three days of fever, rigors and fatigue. Review of systems was positive for nausea but negative for any other localizing symptoms of infection. Physical exam was unremarkable. Despite broad spectrum antibiotics and the continuation of the patient's prophylactic antibiotic therapy, he continued to have high fevers. Extensive infectious workup was unrevealing. CT chest demonstrated an enlarged supraclavicular lymph node, which subsequently showed uptake on WBC scan. Biopsy of the lymph node revealed mycobacterium tuberculosis. WBC scan also showed uptake in the patient's lungs, lumbar spine and sacral iliac joints suggestive of disseminated disease. Bone marrow biopsy was also positive for mycobacterium tuberculosis. The patient was started on quadruple therapy with rifabutin, isoniazid/B6, pyrazinamide, and ethambutol with the resolution of his fevers. He was discharged home with one year of direct observed therapy per the local health department.

This case illustrates the potential for false negative TTD skin testing in end stage renal disease patients and suggests that empiric treatment for latent tuberculosis in patients from endemic areas may prevent reactivation of latent infection post-transplant.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #23 Category: Clinical Vignette

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Tanya Singh Kakar
Additional Authors: Abdalla Kara Balla, Brett Holmes

Immunotherapy Related Pneumonitis, Rare but Lethal Side Effect

Introduction

Lung Cancer is the leading cause of cancer-related deaths in men and women. In advanced non-small cell lung cancers, immune checkpoint inhibitors such as programmed cell death-1(PD-1) inhibitors have become second-line therapy. Immunotherapy-related pneumonitis with PD-1 inhibitors is a rare diagnosis which is difficult to diagnose, and has adverse prognosis.

Case presentation

A 58-year-old male presented with fever, breathlessness, and cough for 2 weeks He was a chronic smoker (40 pack-years), with underlying emphysema and lung adenocarcinoma stage 3C diagnosed 9 months prior to presentation. He received 4 cycles of immunotherapy with Durvalumab (PD-1 inhibitor) after carboplatin and paclitaxel-based chemotherapy. He was found to be hypoxic and required oxygen. Chest X-ray was suggestive of bilateral pulmonary infiltrates (left>right). CT chest suggested new and asymmetric ground glass opacities (left>right), which increased on the repeat scan. Sputum culture was positive for Pseudomonas aeruginosa. Fever resolved with antibiotics but hypoxia worsened. The diagnosis of immunotherapy-related pneumonitis was made and treatment with steroids initiated. Due to the risk of intubation, bronchoscopy was deferred by the patient. Hypoxia persisted despite high flow oxygen and his condition continued to deteriorate. A shared decision was made to initiate comfort care and the patient died 2 weeks later.

Conclusion

Immunotherapy-related pneumonitis should be considered in the differential diagnosis of all patients presenting with hypoxia while on immunotherapy. Few studies show benefits with systemic steroids and infliximab, but more research on risk factors and treatment of this rare but lethal side effect of PD-1 inhibitors is required.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #24 Category: Clinical Vignette

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Abdalla Kara Balla
Additional Authors: Ramy Mando, Adam Hafeez, Richard Bloomingdale, Justin Trivax

An Anginal Aneurysm: Case Report of a Saphenous Vein Graft Aneurysm Decades Following Bypass Grafting

Introduction: Saphenous vein graft aneurysms (SVGA) are complications that are rarely seen following coronary artery bypass grafting with one study estimating a rate of 0.07% after review of > 5500 grafts. Complications associated with SVGA include fistulas, right atrial compression, compression of surrounding arteries, acute coronary syndromes, and rupture.

Case presentation: We present a case of an 83 years old male who underwent a CABG in 1994 and presented with complaints of cough, back pain and exertional dyspnea for three months. Physical exam was notable for an elevated blood pressure of 167/101 mmHg. Cardiopulmonary examination was normal. CT of the coronary arteries revealed an incidental 5.4 x 4.0 cm aneurysm in the mid-body of the SVG compressing the pulmonary artery and left main coronary artery. The findings were confirmed with a diagnostic cardiac catheterization. Two weeks later, the patient underwent percutaneous intervention of the SVG and left circumflex artery and aneurysm repair with insertion of an 8 x 100 Viabhan covered stent. Prior to intervention, there was 50% stenosis noted between the SVG-circumflex with TIMI Grade 2 flow; post intervention, there was 0% stenosis with TIMI grade 3 flow. Patient was discharged home on dual antiplatelets therapy.

Conclusion: SVGA are considered an infrequent entity after CABG and requires a high index of suspicion. Definitive diagnosis is usually established with cardiac catheterization. A systematic review estimated in-hospital and/or 30-day mortality to be 13.9%. Larger systematic reviews would be helpful in optimizing the management of this life-threatening complication.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #25 Category: Research

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Dillon Karmo
Additional Authors: Sohail Farshad, MD. Alexandra Halalau MD FACP, Sayf Al-Katib MD, Julie George, Elena Schiopu MD

Subclinical Coronary Atherosclerosis in ANCA Associated Vasculitidies Through Visual Assessment of Coronary Arterial Calcium

Background/Purpose: Many connective tissue disorders have been associated with cardiovascular disease via chest computed tomography (CT) with coronary arterial calcium (CAC) assessment. However, there is no published data that evaluates CAC in granulomatosis with polyangiitis (GPA), eosinophilic granulomatosis with polyangiitis (EGPA), and microscopic polyangiitis (MPA). The purpose of this study is to evaluate cardiovascular disease through visual assessment of CAC in GPA/EGPA/MPA compared to controls.

Methods: Retrospective chart review for adults with GPA/MPA/EGPA who had chest CT within 1 year of respective vasculitis diagnosis and cholesterol profile within 5 years of CT scan. Exclusion criteria included history of coronary artery disease, peripheral arterial disease, or stroke. One radiologist reviewed all CT scans for both groups matched by age, sex, race, body mass index, and same year of CT scan. Visual CAC assessment was done through previously validated ordinal scoring.

Results: Both groups shared similar cardiovascular risk factors. Mean CAC score in GPA/MPA/EGPA was 2.18 ± 2.46, compared to controls 1.46 ± 1.80; $p = 0.089$. Prevalence of CAC in GPA/MPA/EGPA was 60.7%, 54.1% in controls; $p = 0.464$. Adjustment for age, sex, race, BMI, smoking, family history of CAD, and hypertension revealed CAC prevalence of 72.4% in GPA/MPA/EGPA and 55.5% in controls; $p = 0.199$.
Conclusion: CAC score and prevalence are higher in patients with GPA/MPA/EGPA compared to controls, indicating increased cardiovascular disease. Though not statistically significant, likely due to small sample size, we believe these results show an important trend that needs consideration in clinical practice and studied further.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #26 Category: Clinical Vignette

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Majd Khasawneh
Additional Authors: Priscilla Sigua Arce, MD; Abhishek Swami, MD

Hemophagocytic Lymphohistiocytosis and Its Impact on the Kidney: A Case Report

Hemophagocytic lymphohistiocytosis (HLH) is a syndrome characterized by hyperactive yet ineffective immune response with severe systemic involvement. The most frequent renal manifestation is acute kidney injury (AKI) with most cases due to acute tubular necrosis (ATN) and hypoperfusion. A 66-year-old man presented with fatigue, fever and dyspnea for 3 weeks. Past medical history included Hodgkin lymphoma in remission and sarcoidosis. Tachycardia was noted on physical exam. Labs on admission showed: leukocytes 4.8 bil/L; hemoglobin 12.9 g/dL; platelets 158 bil/L; blood urea nitrogen 57 mg/dL; creatinine 3.75 mg/dL (baseline 1.3 mg/dL); AST 267 U/I, ALT 173 U/I; bilirubin 1.8 mg/dL; urinalysis was positive for hyaline casts, ketones, protein and blood. Fluids were given. A drop in leukocytes, hemoglobin, platelets was noted; creatinine mildly improved. Due to concerns for thrombotic microangiopathy and disseminated intravascular coagulation, hemolytic workup was ordered; LDH 1,101 U/L; haptoglobin 8 mg/dL; fibrinogen 166 and D-dimer 2,159, no schistocytes and ferritin 12,000 ng/mL were noted. Bone marrow biopsy showed hemophagocytosis. Triacylglycerol and soluble interleukin 2 receptor alpha were 671 mg/dL and 23,920 pg/mL, respectively. Five out of 8 criteria for diagnosis of HLH were fulfilled. Kidney involvement was felt to be due to AKI secondary to ischemic ATN. HLH requires a high index of suspicion as it overlaps with multiple systemic processes. AKI can be present in 62% of patients. AKI is a major prognostic factor as it decreases the probability of achieving complete remission at 6 months in patients whose trigger is hematologic malignancies.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #27 Category: Clinical Vignette

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Zahra Khaled
Additional Authors: Syed Farrukh Mustafa, Alexandra Halalau, Carl Lauter

Chikungunya Fever in the Returning Pregnant Traveler

Fever, joint pain and rash in a returning traveler represent a broad differential. Chikungunya is a particular concern for pregnant women because rarely vertical transmission causes severe disease in the newborn. We describe a case where such a patient returning from India tested positive for Chikungunya fever.

A 32 year old South Asian female at 30 weeks of gestation and remote history of Dengue fever, developed fever and right ankle and left knee pain on the eve of returning from India. She did not take pre-travel chemoprophylaxis and reported being exposed to mosquito bites during her stay. She had a temperature of 102.7 F and was tachycardic at 134 bpm. Physical exam demonstrated bilateral wrist tenderness, right inguinal adenopathy and right ankle swelling, erythema and warmth. Labs showed leukocytosis of 14.2 bil/L with neutrophilia. She was treated with cefazolin for right foot cellulitis attributed to insect bite. Blood cultures and malaria testing returned negative but Chikungunya IgM returned positive. She was treated supportively with intravenous hydration and analgesia. Fetal evaluation by obstetrics revealed normal fetal movements and fetal heart tracing - Category 1. Her symptoms resolved in a few days and she was discharged in a stable condition with an uneventful delivery later.

Chikungunya fever is an important cause of febrile illness in returning travelers to the United States. It can be challenging to diagnose given similarity to other tropical fevers but prominent polyarthralgia is an important diagnostic clue. More focus is needed on potential vaccines for prevention and chemoprophylaxis education.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #28 Category: Clinical Vignette

Program: Beaumont Hospital – Royal Oak
Program Director: Sandor Shoichet, MD, FACP
Presenter: Fadi Odish
Additional Authors: Soumil Patwardhan MD, Maryconi Jacob, MD

Gastric Wall Abscess - An Uncommon Culprit of Epigastric Abdominal Pain

Intramural gastric abscess are rare presentations of suppurative gastritis which are often challenging to diagnose and manage. Predisposing factors include diabetes, foreign objects, or gastric surgery. A 75-year old female with a past medical history diabetes mellitus presents to the emergency department with epigastric pain. The patient's symptoms started two days prior with progressive sharp epigastric abdominal pain with nausea and non-bloody non-bilious vomiting. Vitals revealed a temperature 100 °F, blood pressure 148/87 mmHg, heart rate 104 beats/min, and respiratory rate of 18 breaths/min, examination revealed a soft abdomen with epigastric tenderness with deep palpation. Initial lab work was only significant for a leukocytosis of 11,300 cells/mm3 with a left shift. She underwent computed tomography (CT) of her abdomen which revealed hypoenhancement possible abscess in the anterior wall measuring 2.5 cm in diameter. (Figure 1). EGD revealed a deformity consistent with extrinsic compression vs intramural lesion found in the gastric antrum. Upper endoscopic ultrasound (UEUS) revealed a 45mm x 40 mm intramural (subepithelial) heterogenous density containing mass versus debris, FNA drainage produced 5mL of opaque, puru fluid (Figure 3). Cultures Streptococcus intermedius and Micrococcus species. Pathology was negative. Patient symptoms improved the following day and she completed a 3 week course of oral levofloxacin and metronidazole. Four week follow up CT scan showed complete resolution of the abscess. This case outlines an unusual culprit of a commonly encountered complaint in epigastric abdominal pain. Additionally, no previous reports of Streptococci intermedius were identified in our literature search.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #29 Category: Clinical Vignette

Program: Central Michigan University - Saginaw
Program Director: Nicholas Haddad, MD, FACP
Presenter: Rawan Amir
Additional Authors: Wadea Al-Khonaizi: Consultant rheumatologist, Eric McWilliams: Consultant cardiologist, , Johns Hopkins Aramco Healthcare

Culture Negative Late Prosthetic Valve Endocarditis Unmasking an Unusual Diagnosis: A Case Report

Background:
Blood-culture-negative-endocarditis (BCNE) is defined as endocarditis in which blood cultures taken by standard laboratory methods remains sterile. Causes of BCNE include infectious etiology not identified by culture and noninfective causes including systemic lupus erythromatosis (SLE) and antiphospholipid syndrome (APS). Those with prosthetic valves have a higher risk of developing infective-endocarditis.

Case Summary:
Herein we report a case of a 46-year-old Saudi lady labelled to have rheumatic heart disease who presented with fever and vegetation post mitral and aortic valve replacement. She was initially diagnosed and treated as a case of prosthetic valve endocarditis. However, after failure to respond to treatment and further investigation, it became clear she had Libman-sacks endocarditis associated with undiagnosed APS secondary to SLE.

Discussion:
In retrospect our patient had SLE & APS for many years which was missed in several institutions in Saudi Arabia and America. Although married, she suffered from primary infertility and thus did not have classic symptoms of recurrent fetal loss which may have triggered an earlier diagnosis.

As physicians and caregivers, we can all make cognitive errors. In this case, premature closure occurred several times by assuming her problems were due to valve disease and complications of valve replacements. With fever presentation, anchoring prevented her physicians from exploring alternative diagnoses to endocarditis and when multiple cultures were negative, confirmation bias compounded the problem and led to ignoring possible other explanations. Patient factors also played a role with seeking multiple second opinions and initial lack of trust in her local care.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #30 Category: Clinical Vignette

Program: Central Michigan University - Saginaw
Program Director: Nicholas Haddad, MD, FACP
Presenter: Shakeel Jamal
Additional Authors: Osman Yusufzai MD, Angadbir Parmar MD, Roma Srivastava, MD

When AML Presents with Generalized Lymphadenopathy!!

Introduction:
Acute Myeloid Leukemia (AML) very rarely presents with generalized lymphadenopathy. Myeloid Sarcoma is characterised by extra-medullary manifestation in the form of tumor or masses of immature myeloid cells. It is linked with leukemic diseases of the myeloid cell lineage. Most commonly in patients with acute myeloid leukemia (AML) and less commonly in those with myelodysplastic syndrome (MDS), Chronic Myeloid Leukemia (CML), or other myeloproliferative disorders.

Case:
We report a case of 52 year old caucasian male who presented with generalized weakness, shortness of breath, night sweats and weight loss. Patient had generalized lymphadenopathy on physical exam. WBC count were 34,000 with high myeloblasts/metamyelocyte count. CT scan of neck and chest reported sub mandibular, cervical, mediastinal, supraclavicular, hilar lymphadenopathy. Bone marrow biopsy had cellularity of 80-85% with myeloblasts upto 30% and concurrent flow cytometry showed atypical CD117 positive, partial CD34 positive myeloblasts suggestive of acute myeloid leukemia. Lymph node biopsy reported CD3 positive T-cell and CD20 positive B-cells and flow cytometry analysis reported "Blastic hematopoietic neoplasm, favor acute myeloid leukemia (myeloid sarcoma)."

Conclusion:
2-7% of patients with AML present with extra medullary infiltration with or without bone marrow involvement. Myeloproliferative disorders, MDS and AML are considered to be poor prognostic indicators when linked to MS. De novo Myeloid Sarcoma is reported to be sensitive to radiotherapy and chemotherapy with prolonged survival. The learning point in this case is AML can also very rarely present with generalized Lymphadenopathy.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #31 Category: Clinical Vignette

Program: Central Michigan University - Saginaw
Program Director: Nicholas Haddad, MD, FACP
Presenter: Muhammad Zatmar Khan
Additional Authors: Asim Kichloo, Navya Sree Vipparla, Zain El-Amir, Michael Aljadah.

Caroli's Disease: A Presentation of Acute Pancreatitis and Cholangitis

Caroli's disease, a rare autosomal recessive disease, has a prevalence of about 1 in 1,000, 000, and presents in different forms. Largely a disease of the intrahepatic biliary ductal ectasia, extra hepatic choledochal cysts are not uncommon and can present as cholangitis with more rare presentation of acute pancreatitis.

A 37 year old female with cholecystectomy 7 years ago, presented with abdominal pain, fever and nausea that started the day before. Pain was described as epigastric in nature, 10/10 with radiation to the back and no association with food whatsoever. Abdominal palpation elicited epigastric tenderness. A presumptive diagnosis of acute pancreatitis was made. CT scan showed a common bile duct size of 1.6 cm; pancreas was normal. The labs were as follows: total bilirubin 4.1 mg/dl, direct bilirubin 3.1 mg/dl , AST and ALT 850 IU/L and 1025 IU/L respectively, amylase and lipase of 581 U/L and 1328 IU/L respectively. Hepatitis immunity panel was negative for acute hepatitis. IV Ciprofloxacin and Metronidazole was started for possible acute cholangitis. ERCP showed dilated intrahepatic ducts: Caroli's disease variant and a common bile duct dilation of 10mm, with a choledochal cyst. Sphincterotomy was done with establishment of bile flow as documented on magnetic resonance cholangiopancreatography. The patient was later discharged home on oral antibiotics.

It is important to be familiar with the presentation of Caroli's disease, an infrequent occurrence. Imaging in association with biochemical testing is an important diagnostic tool and therapy should be targeted towards symptom relief and preventing complications.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #32 Category: Clinical Vignette

Program: Central Michigan University - Saginaw
Program Director: Nicholas Haddad, MD, FACP
Presenter: Mohamed Mohamed
Additional Authors: Mohamed A Mohamed, Osman K Yousafzal, Shakeel Jamal, Sayed Osama

ANCA Associated Vaculitis Leading to Midline Destruction

Introduction: Cocaine is highly abused in the Unisted States. Coaine can lead to midline destruction of ishemic necrosis and by causing vasculitis. It is a known cause midline destruction lesions (CIMDL) in a inority of users resulting in perforation of the nasal spetum. Cocaine-induced vasuclitis is due to contaminant in cocaine, "levamisole".

Case: A 57-Year old male with history of pyertension. CKD stage III and cocaine use who presented in clinic with nasal perforation. Patient did have complete perforation of the nasal spetum. Patient actively snorted cocaine, which lead to midline nasal septal perforation. P-ANCA was positive. C ANCA, ANA HepB Ag, HepC and HIV Abs were negative. Although, patient had history of CKD stage III, it seems that vaculitis had not affected his kidneys with no evident hematuria or protienuria on urinalysis. Cocaine induced vasculitis does not progress or gets worsened as long as patient stops using cocaine.

Conclusion: A triad of ANCA associated antibodies, midline destrction and lack of system symptoms point towards cocaine induced vasculitis and this hould raise high degree of intuition when treating patients with cocaine induced midline destruction that can progress to involve other organ systems causing hemorrhagic skin lesions, renal involvement which is very rare, leucopenia and high titers of cytoplasmic and perinuclear ANCA-associated autoantibodies.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #33 Category: Clinical Vignette

Program: Central Michigan University - Saginaw
Program Director: Nicholas Haddad, MD, FACP
Presenter: Jared Steinberger
Additional Authors: Ali Hachem, Dhara Patel

Autonomic Dysfunction

Autonomic dysfunction affecting the cardiovascular system is an often underdiagnosed and misunderstood condition that has a myriad of manifestations, including persistent orthostatic hypotension. We present a case of a 44 year old female with a past medical history of poorly controlled insulin dependent type 2 diabetes mellitus, chronic kidney disease stage 3a secondary to diabetic nephropathy, diabetic retinopathy, previous osteomyelitis, peripheral vascular disease, peripheral neuropathy, who presented to our clinic with a chief complaint of lightheadedness for the previous five months. The patient was found to have a fasting glucose of 336, and with significant hypotension while in her wheelchair. The patient was not on any anti-hypertensives. The patient's blood pressure was 88/47 while sitting in her wheelchair, and 211/100 lying supine on the examination table. Etiologies for the patient's profound orthostasis were pursued without clear etiology, intravenous fluids given, but patient remained orthostatic. The patient eventually underwent cardiac tilt table testing. Tilt table testing revealed a supine blood pressure of 177/94 and a sustained heart rate of 93 over twenty minutes. After tilting, the patient's blood pressure immediately dropped to 82/47 with no significant increase in heart rate, remaining 98-100 for twenty minutes. The patient's lowest recorded blood pressure was 73/40 during the twenty minutes after tilting. After return supine, the patient's blood pressure slowly increased to 133/79 with a heart rate of 92. The patient was diagnosed with diabetic cardiovascular autonomic neuropathy and after shared decision making, provided conservative measures to manage her symptoms.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #34 Category:

Program: Garden City Hospital
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #35 Category:

Program: Garden City Hospital
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #36 Category: Clinical Vignette

Program: Henry Ford Allegiance Health
Program Director: Vivek Kak, MD, FACP
Presenter: Faria Ali
Additional Authors: Tarvinder Matharu, R. Venkata Nagesh, Elizabeth Gordon Spratt, Ben J. Friedman

Calciphylaxis in Stage 3 CKD Successfully Treated with Sodium Thiosulfate

Introduction: Calciphylaxis, aka Calcific uremic arteriolopathy, is a rare, life-threatening entity due to vascular calcification. 'Calciphylaxis' is a misnomer, as it implies a systemic anaphylactic or hypersensitivity reaction. It causes ischemia in multiple organs and skin ulcers, owing to progressive calcification in small and medial arteries. It has a poor prognosis and often occurs in patients with end-stage renal disease undergoing hemodialysis, or on hemodialysis and warfarin, hyperparathyroidism and chronic kidney disease. It is also seen in acute kidney injury, kidney transplant recipients or rarely in patients with normal kidney function. Even today, no definitive therapeutic or diagnostic guidelines exist to prevent the devastating consequences of calciphylaxis.

Case presentation: We report an unusual case of calciphylaxis in a morbidly obese 72-year-old female patient with a past medical history of type 2 Diabetes Mellitus, Hypertension, chronic systolic heart failure, coronary artery disease, status post Coronary Artery Bypass Surgery and aortic valve replacement and chronic kidney disease, without any history of an autoimmune condition, not on dialysis or on warfarin. It is unclear why she developed calciphylaxis in the absence of these risk factors. After being on treatment with sodium thiosulfate intravenous infusions for two months, her lesions significantly improved.

Conclusions: This case illustrates that early diagnosis, intervention and a multidisciplinary approach are of utmost importance in the management of calciphylaxis. More importantly, this case highlights the fact that sodium thiosulfate, when used in the correct clinical setting, can actually improve prognosis in patients.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #37 Category: Clinical Vignette

Program: Henry Ford Allegiance Health
Program Director: Vivek Kak, MD, FACP
Presenter: Saleha Asgher
Additional Authors: Vivek Kak

Cryptococcus Neoformans Automatic Implantable Cardioverter-Defibrillator (AICD) Endocarditis

Cryptococcus neoformans is an encapsulated yeast found in soil. Systemic infection results from inhalation of spores or desiccated yeasts leading to primary pulmonary infection. It rarely causes IE with most reported cases involving a cardiac prosthetic valve after surgery and only a few involving native valve.

We present here a case of 57-Year-old white woman with past medical history of diabetes, ESRD on hemodialysis and ischemic cardiomyopathy with AICD implantation presented to the hospital with 2 episodes of AICD firing. On presentation, she also reported ongoing headache and progressive fatigue for 3-weeks. AICD interrogation revealed non sustained VT initially thought to be related to electrolyte imbalance as evidenced on her initial labs. Subsequently, two sets of blood cultures were found positive for cryptococcus neoformans. TEE revealed vegetation on the ventricular lead of the defibrillator measuring 2 cm X 0.67 cm. Patient was initially started on fluconazole. Given her persistent headache, lumber puncture was performed that revealed lymphocytic pleocytosis and her antimicrobials were switched to amphotericin B and flucytosine for 2 weeks followed by additional 4 weeks of high dose fluconazole with concomitant removal of AICD device along with leads. Patient recovered completely on treatment.

The infection burden associated with Cardiac implantable electronic devices (CIED) has increased given an overall increase in CIED implantation. Most of this increase is related to AICD implantation. Multiple risk factors have been identified. Fungal infections causing CEID endocarditis is a rare entity but is associated with high mortality. Removal of CIED is imperative for recovery.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #38 Category: Clinical Vignette

Program: Henry Ford Allegiance Health
Program Director: Vivek Kak, MD, FACP
Presenter: Mandeep Malik
Additional Authors: Housam Sarakbi, MD, FACR

Warfarin for Migraines?!

Background:
Headaches have been extensively reported in Antiphospholipid syndrome (APS). Headaches associated with APS are often untreatable, poorly responding to analgesics and occurs for years before the diagnosis of APS. Conventional imaging studies are usually negative. Many therapeutic agents such as hydroxychloroquine, B-cell inhibition, complement inhibition have been proposed to manage thrombotic APS. Nonetheless, Heparin followed by Long-term anticoagulation remains the cornerstone of treatment.

Case Report:
A 36-year-old Caucasian female with past medical history significant for Tumid Lupus Erythematosus treated with Hydroxychloroquine, Fibromyalgia with no history of Thrombosis, miscarriages, fetal death or preeclampsia. She presented with severe headaches, 8/10 intensity for the last 4 years. Headaches reported as stabbing pain, occasionally localizing to right side. Patient had undergone extensive workup by Neurology and Rheumatology including a normal Lumbar Puncture and multiple normal MRI brain. Blood work showed Lupus Anticoagulant positivity. The patient was tried on multiple treatments for symptomatic Headaches without any significant improvement The patient was then started on warfarin Therapy by Rheumatology for Headaches associated with APS with INR goal of 2.5-3.5 which significantly relieved the symptoms. Later, warfarin was discontinued by the neurologist, who the patient saw for follow up, resulting in worsening of the headaches. The headaches resolved again on restarting the Warfarin.

Learning Points:
1.Headaches and migraine in particular are common in APS and aPL-positive patients.
2.The pathogenesis of APS headaches is unclear, but it could be related to platelet dysfunction.
3.APS patients with severe refractory migraine show very good response to anticoagulation therapy.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #39 Category:

Program: Henry Ford Health System – Detroit
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #40 Category:

Program: Henry Ford Health System – Detroit
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #41 Category: Clinical Vignette

Program: Henry Ford Health System – Detroit
Program Director: Odaliz Abreau Lanfranco, MD, FACP
Presenter: Taha Ashraf
Additional Authors: Timothy Bowman, Omar Aljamal

Hafnia alvei: Pro- or Con-Biotic?

Hafnia alvei is a gram-negative bacterium normally present as part of our gut flora that is rarely implicated in infections in humans. It has been used industrially to help ferment foods including milk and recently is finding fame as a probiotic in dietary supplements. The bacterium's ability to stimulate satiety via its ClpB protein has been used commercially in products to help control appetite and lose weight. Unfortunately, these bacteria are not without risk. We describe a case of a 71 year old male recipient of a living donor liver transplant 3 years prior who presented to us with fevers and rigors but no other localizing symptoms. He was found to grow Hafnia alvei in two sets of blood cultures and a stricture in his bile duct on ERCP. After a stent was placed and treatment began with ciprofloxacin, he quickly defervesced and ultimately achieved a full recovery. This case highlights the risk of not only Hafnia Alvei but also the potential dangers of probiotics in susceptible individuals.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #42 Category: Clinical Vignette

Program: Henry Ford Health System – Detroit
Program Director: Odaliz Abreau Lanfranco, MD, FACP
Presenter: Ivan Columbus Morales
Additional Authors: 2. Keith Mullins, Senior Staff Physician, Department of Gastroenterology and Hepatology, Henry Ford Hospital.

New Toys, New Complications: A Case Report of Lymphocytic Colitis Secondary to Entresto

Introduction: Drug development is an arduous process that requires significant time and financial investment from pharmaceutical companies. One of the newer medications that has gained traction in the marketplace is Sacubitril, a Neprilysin Inhibitor. It is currently approved for the treatment of heart failure in combination with Valsartan (Entresto). Once a new agent is released, adverse effects that were unexpected based on the initial trial population might be detected.

Case presentation: A 78-year-old female with multiple comorbidities, including non-ischemic cardiomyopathy, presented with sub-acute diarrhea. She endorsed six non-bloody watery bowel movements per day, weight loss and dehydration for the past two months. No sick contacts or recent travel. She was in her usual state of health; the only recent change was starting Entresto for heart failure four months prior to presentation. Infectious, endocrine and autoimmune panels were unremarkable. An esophagogastroduodenoscopy and colonoscopy were performed. Endoscopic views were unremarkable, but biopsies from the colonic wall mucosa showed abundant intraepithelial lymphocytes suggestive of lymphocytic colitis. Entresto was discontinued, and she was treated with a short course of Budesonide. Symptoms resolved shortly afterwards.

Discussion: Lymphocytic colitis is a clinicopathological syndrome of unclear pathogenesis. It is characterized by chronic watery diarrhea, an endoscopically normal appearing colon, with increased intraepithelial lymphocyte count on pathology. It has been associated with tobacco use and many pharmacological agents including PPI inhibitors, NSAIDs, and anti-hypertensives. To our knowledge, this is the first case to be associated with Sacubitril-Valsartan, which is becoming a commonly prescribed heart failure medication.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #43 Category: Clinical Vignette

Program: Henry Ford Health System – Detroit
Program Director: Odaliz Abreau Lanfranco, MD, FACP
Presenter: Zachary Demertzis
Additional Authors: Gina Hurst

Acute Respiratory Failure Due to Dronedarone Induced Pulmonary Fibrosis

Dronedarone is a class III anti-arrhythmic agent similar to Amiodarone that is used in patients with Atrial Fibrillation. Dronedarone's structural modification (removal of iodine moiety and addition of methane-sulfonamyl group) results in its decreased lipophilicity causing less tissue accumulation, theoretically decreasing its side effect profile compared to Amiodarone. Typical side effects of Dronedarone and Amiodarone include pulmonary, hepatic, and thyroid toxicity but are typically seen after months of use. Our case involves a 67-year-old female with a history of atrial fibrillation refractory to rate control who received six days of Dronedarone and developed interstitial pulmonary fibrosis. One week after initiating Dronedarone, she began to develop worsening dyspnea on exertion and increased oxygen requirements. Initial chest x-ray and CT chest revealed reticular opacities concerning for interstitial pneumonitis. She underwent bronchoscopy with biopsies that showed reactive changes of the alveolar parenchyma and fibrin deposits with no granulomatous inflammation of the bronchial epithelial cells. She continued to decompensate, requiring intubation and was started on pulse dose Methylprednisolone. Despite being successfully extubated, she remained hypoxic requiring humidified high-flow nasal cannula. Repeat chest x-ray revealed worsening reticular opacities with diffuse fibrosis. Ultimately the patient pursued comfort measures and expired. Interstitial lung disease is a known adverse reaction of Dronedarone therapy; however, this case shows that patients on this anti-arrhythmic agent can decompensate rapidly. We believe it is important for clinicians to be cognizant and assess their patient's pulmonary function status prior to initiating Dronedarone despite its lower side effect profile compared to Amiodarone.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #44 Category: Clinical Vignette

Program: Hurley Medical Center – Flint
Program Director: Vijay Naraparaju, MD, FACP
Presenter: Rahul Gupta
Additional Authors: Sergio Ponze MD, Vijay Naraparaju MD, Vaibhav Sahni MD

Life Saver for a Life Giver: Hemodialysis in a Patient with Twin Pregnancy and Chronic Kidney Disease

We describe a rare case of a successful outcome of twin pregnancy in a patient on hemodialysis with advanced CKD. Our patient is a 37-year-old African American woman with a history of end-stage renal disease on hemodialysis secondary to hypertensive nephrosclerosis and excessive use of nonsteroidal anti-inflammatory drugs (NSAIDs). The patient was pregnant with dichorionic diamniotic twins. Due to significant risks involved with the pregnancy, the option of termination was discussed, however, the patient was keen on maintaining her pregnancy. She underwent dialysis six times/week via right internal jugular tunnel dialysis catheter inserted at 18 weeks of gestation. Significant past medical history included Crohn's disease and anemia of chronic disease secondary to CKD. The patient's pregnancy was smooth on hemodialysis, with the exception of occasional blood transfusions for anemia. At 32 weeks of gestation, she was admitted with abdominal discomfort and diarrhea consistent with a flare-up of Crohn's disease, treated with prednisone and certolizumab. The patient then developed worsening edema which was managed with Lasix and dialysis along with monitoring of fetuses. Dosage of hemodialysis was increased to 3.5–4.0 hours/session, keeping systolic blood pressure (SBP) above 120 mmHg, negating hypotension and fluid overload. Erythropoietin was given at increased doses. The patient was found to have preterm premature rupture of membranes (PPROM), treated with azithromycin and ampicillin as per protocol. Successful delivery was performed via cesarean section, and the patient has been doing well on hemodialysis following pregnancy. To the best of our knowledge, this is third such reported case.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #45 Category:

Program: Hurley Medical Center/MSU – Flint
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #46 Category:

Program: Hurley Medical Center/MSU – Flint
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #47 Category: Clinical Vignette

Program: Huron Valley Medical Center – DMC
Program Director: Jeet Pillay, MD, FACP
Presenter: Javier Arce
Additional Authors: Tate Bonifer, MD; Betsy Joseph, MD; Hussein Tehaili, MD; Jeet Pillay, MD

Fixing a Problem Once and for All: A Case of Pneumonia and Labile INR

A 58-year-old woman presented to the emergency department complaining of a one-day history of shortness of breath, productive cough of green-colored sputum and hemoptysis, and right-sided pleuritic chest pain.

Relevant medical history includes multiple episodes of deep venous thromboembolisms secondary to plasminogen activator inhibitor-1 (PAI-1) gene 4G/5G polymorphism for which she takes warfarin, history of labile INR, and pulmonary sarcoidosis that is currently in remission.

On physical examination, her vital signs were within normal limits, her breathing was nonlabored on room air, and wheezing was appreciated on auscultation of the right lung. Initial workup revealed a consolidation in the right lower lobe on chest X-ray, leukocytosis, and an INR of 6.7. She was admitted with a diagnosis of community-acquired pneumonia.
PAI-1 is a protein secreted by endothelial and smooth muscle cells that inhibits tPA. By inhibiting tPA, plasminogen is not converted to plasmin, and thus, PAI-1 inhibits fibrinolysis. An insertion/deletion polymorphism in the promoter sequence of the PAI-1 gene can cause increased levels of serum PAI-1 creating a prothrombotic state especially in inflammatory states with high levels of proinflammatory cytokines, particularly interleukin-1.

While unrelated to her pneumonia, the patient was found to have a supratherapeutic INR. Although this did not impact her course of treatment, she did admit to hemoptysis and would have been at risk for further bleeding episodes. Given her history she did require chronic anticoagulation. Due to difficulty in achieving a stable therapeutic INR, her anticoagulation was switched from warfarin to rivaroxaban.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #48 Category: Clinical Vignette

Program: Huron Valley Medical Center – DMC
Program Director: Jeet Pillay, MD, FACP
Presenter: Susan Lukas
Additional Authors: Tate Bonifer PGY-II; James Gordon, MD

Splenic Abscess: A Bunch of Vague Symptoms

Splenic abscess has an incidence of less than 1% and mortality between 14-80% making it difficult to diagnose and deadly if missed.

A 48-year-old male with history of diabetes mellitus type II and splenic infarct presented with pleuritic left lower chest pain, left upper abdominal pain and nausea. On physical exam no splenomegaly was noted. He had diabetic ketoacidosis and was treated appropriately. On day three of admission he had worsening left sided chest pain and was febrile at 38.4 C. CT for pulmonary embolism showed splenic infarct with fluid collection and air suggestive of splenic abscess. Abscess was drained and culture grew pan sensitive E. coli, which was simultaneously found in the urine culture. He was treated with appropriate antibiotics and underwent splenectomy.

Splenic abscess is usually secondary to endocarditis or hematogenous seeding. Our patient likely had hematogenous spread from urinary tract source as the same organism was found in both locations. Endocarditis with gram negative bacteria is extremely rare and our patient had transesophagealechocardiogram at a local hospital that was negative for vegetation. Splenic abscess poses a challenge for clinicians to diagnosis due to its rarity and vague and nonspecific presentation. Abdominal pain (usually left upper quadrant), fever, nausea, left lower chest pain, pleuritic chest pain with or without splenomegaly are all common. Failure to recognize could potentially be fatal. It is important to keep splenic abscess on one’s differential especially if patients vague symptoms fail to improve with treatment.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #49 Category: Clinical Vignette

Program: Huron Valley Medical Center – DMC
Program Director: Jeet Pillay, MD, FACP
Presenter: Meri Tarockoff
Additional Authors: Dr. Jane Syriac MD, Internal Medicine

Neurological and Hormonal Side Effects of Hyperprolactinemia

Oligomenorrhea, amenorrhea, glactorrhea, infertility and decreased bone mass are all common symptoms of hyperprolactinemia. The incidence of prolactinomas in the United States is about ~200,000 cases per year and represent < 2% of all diagnosed intracranial tumors. Many signs and symptoms of prolactinomas overlap with other more common disorders such as pregnancy, physiologic stress, hypothyroidism and medications such as anti-psychotics, anti-depressants and neuroleptics which can cause the condition to be overlooked and even misdiagnosed.

A 22-year-old female presented to clinic with a new onset persistent headache, vision changes, galactorrhea and oligomenorrhea for two months. She was a non-pregnant female whom denied being sexually active and had no previous medical history or medication usage. Basic clinic labs such as CBC, CMP, TSH, serum hCG and UA were done and were found to be non-conclusive for a diagnosis. Subsequent broad lab tests were ordered which included prolactin levels, ACTH, TSH, CRH, LH, TRH, GnRH, FSH and GHRH. Prolactin levels were 135.08 ng/ml (2.8-29.2 ng/ml) and all other anterior pituitary hormones were within normal range. Brain MRI was ordered and showed a 5 x 7 x 6 mm pituitary adenoma. Cabergoline 0.5 mg was prescribed bi-weekly for treatment and prolactin levels decreased substantially within 3 months of therapy. This case illustrates the importance of conducting a good physical exam, interview, ordering pertinent labs/imaging to diagnose a rare tumor. Diagnosing hyperprolactinemia promptly in a patient may decrease burden of disease, decrease emotional distress and increase quality of life.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #50 Category: Clinical Vignette

Program: Huron Valley Medical Center – DMC
Program Director: Jeet Pillay, MD, FACP
Presenter: Hussein Tehaili
Additional Authors: Lawrence Macdonald MD

Hemidiaphragm Paralysis after Herpes Zoster Infection

A 76-year-old man was diagnosed with shingles on the right side of his neck which was treated with methylprednisolone and valacyclovir. He had multiple follow ups with his primary care physician and was started on amoxicillin followed by clindamycin for superimposed cellulitis. His primary physician ultimately sent the patient to the ED for concern of cellulitis and abscess. He was found to have leukocytosis and an incision and drainage was performed, with wound culture ultimately grew MRSA.

Patient has a history of hypertension, dyslipidemia, and hypothyroidism and lives alone with a dog and cockatiel. He has a remote history of smoking, but quit 1983.
On post-hospitalization follow up, he complained of dyspnea on exertion and a chest x-ray was obtained which showed a raised right hemidiaphragm with associated right middle and lower lobe collapse. He was referred to our pulmonology service and a further investigation with CT showed moderately elevated right hemidiaphragm with adjacent atelectasis and volume loss of right middle and lower lobe. An XR Fluoroscopy was performed to confirm right diaphragmatic paralysis.

This case demonstrates the rare occurrence of motor complications with herpes zoster, which has been reported in multiple case reports. Diaphragmatic weakness from herpes zoster in cervical dermatomes is thought to be a result of involvement of the phrenic nerve which originates at C3-C5. It is generally thought to have a good prognosis with resolution in 2 weeks having been reported. It is important to add to our differential in cases of shingles with pulmonary symptoms.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #51 Category: Clinical Vignette

Program: McLaren Greater Lansing / MSU
Program Director: Amit Ghose MD
Presenter: George Ghareeb
Additional Authors: Dr. Mohan Madala MD

Nothing Small About It! A Rare Case of Vaccine Associated Myopericarditis

Vaccines have been one of the greatest medical advancements of the 20th century, nevertheless there are rare risks for adverse reactions secondary to their administration. In a review of United States Military medical records, in over 230,000 administrations of the smallpox vaccine, only 18 incidents of probable myopericarditis have been reported, less than 0.1%. Myopericarditis is inflammation involving the myocardium and pericardium. Diagnostic criteria for pericarditis include 2 out of 4: typical chest pain, diffuse ST elevations, pericardial friction rub, new/worsening pericardial effusion. For myopericarditis, criteria include: meeting criteria for pericarditis, suggestive symptoms and ECG changes, diagnosis of exclusion, and elevated cardiac enzymes.

A 29 y/o Caucasian male presented to the hospital with acute upper chest pain. Patient had recently received the smallpox vaccination 2 weeks prior. Patient began having injection site erythema and induration of 6 x 5 cm in diameter. He subsequently began to experience fevers, chills, and dull upper chest pain. The chest pain is located in bilateral clavicles and radiates up the neck and jaw. Cardiac enzymes were trended with peak of troponin I at 4.1. ECG performed demonstrates diffuse ST elevations. Echocardiogram performed demonstrates normal LVEF 60-65%, normal diastolic function, normal pulmonary pressures. He underwent coronary angiography which revealed no obstructive epicardial coronary disease. Patient was diagnosed with myopericarditis and treated with anti-inflammatory medication.

Vaccine-associated myopericarditis, although rare, should be considered in young US military personnel presenting with acute typical chest pain within 30 days of live smallpox vaccine administration.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #52 Category: Clinical Vignette

Program: McLaren Macomb Medical Center/MSU
Program Director: Christopher Provenzano, MD
Presenter: Akarsh Parekh
Additional Authors: Akarsh Parekh, MD; Vivek Sengupta, DO; and Mark Zainea, MD

A Case of Stress Induced Cardiomyopathy Presenting as Ventricular Fibrillation Cardiopulmonary Arrest and Complete Heart Block

Introduction:
Takotsubo cardiomyopathy (TCM) is characterized by transient systolic dysfunction of the apical and/or mid segments of heart. It is typically caused by psychological stresses likely due to a catecholamine surge. In this case presentation, we present an extremely rare case of TCM with ventricular fibrillation (VF) and cardiopulmonary arrest (CPA) followed by third degree atrioventricular (AV) block, in a patient without any significant cardiac history.

Case:
A 63 year old female, was found unresponsive with a VF and CPA. After return of spontaneous circulation (ROSC) was achieved, her electrocardiogram (ECG) showed high grade and third degree AV block, with non-specific ST-segment changes and T-wave inversions. Right and left heart catheterization, performed the same day, did not show any significant coronary occlusion. Left ventricular angiogram showed ballooning of the left ventricle. Formal echocardiogram performed hours after presentation showed an ejection fraction of 15-20% with severe hypokinesis of anterior, apical, anteroseptal and lateral walls of the heart, resembling TCM, which eventually improved. Moreover, patient's ECG right after ROSC was achieved showed a high degree AV block which soon evolved into a third-degree AV block; and eventually received a dual chamber pacemaker/implantable cardioverter-defibrillator.

Discussion:
Most commonly TCM presents with chest pain and symptoms of acute myocardial infarction. There have been handful of case reports documenting TCM causing CPA in some patients and other case reports showing TCM causing high degree AV block. We here present a rare presentation of TCM associated with VF and CPA along with a third degree AV block.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #53 Category: Clinical Vignette

Program: McLaren Oakland / MSU
Program Director: Ammar Hatahet, MD, FACP
Presenter: John Berquist
Additional Authors: Jason Kaplan (PGY-2), Andrew Zazaian (attending)

Severe, Symptomatic Hypocalcemia due to Densoumab and Vitamin D Deficiency in a Post-Menopausal Female with Osteopenia

Denosumab is a monoclonal antibody used in the treatment of osteoporosis to prevent bony injuries via increasing bone density. It does so by binding to RANK-L, which is then unable to activate RANK, thereby preventing osteoclast maturation and viability. Although rare, the effect of denosumab can interfere with the body's calcium homeostasis and lead to a hypocalcemic state. We present a case where a post-menopausal female developed severe, symptomatic hypocalcemia from a multifactorial etiology of a side effect from denosumab and concomitant Vitamin D Deficiency. The patient originally presented to the ED with a chief complaint of intermittent and worsening whole body numbness and confusion per her family members. Her serum calcium level on presentation was 4.3 mg/dL and attempts at improvement were refractory to multiple administrations of intravenous calcium; however, her symptoms and calcium levels improved after receiving continuous intravenous calcium and Vitamin D later during her hospital stay. Importantly, this condition could have been prevented as she was not a candidate for denosumab therapy given the results of her most recent bone scan. This case allows for insight on use of denosumab and which patients are optimal candidates for the drug and who are not, as well as the necessary testing and diagnoses to establish before initiating treatment with the drug.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #54 Category: Clinical Vignette

Program: McLaren Oakland / MSU
Program Director: Ammar Hatahet, MD, FACP
Presenter: Jason Kaplan
Additional Authors: Alfred Nessaraj DO, Stela McCarty DO, Matthew Lawson DO, Mazen Sabbaq MD

Basal Ganglia Calcification: A Rare Complication of Hypoparathyroidism

A 49 year-old female, with a history of esophageal cancer in remission, and iatrogenic hypothyroidism status-post radiation, was admitted to the general medical floor after an uncomplicated total hip arthroplasty. During admission, the patient developed new onset dystonic movements. Initial lab studies revealed no acute electrolyte abnormalities, however CT imaging of the brain demonstrated bilateral calcifications of the basal ganglia. After detailed review and discussions, it was discovered that the patient had been diagnosed with pseudohypoparathyroidism at the age of ten after demonstrating dental manifestations of the disease process. The patient was subsequently started on calcium supplementation. In 2015 the patient underwent chemotherapy and radiation for squamous cell esophageal cancer resulting in iatrogenic primary hypoparathyroidism, demonstrated by serum PTH below the diagnostic threshold for detection.

Hypoparathyroidism is a rare endocrine disorder with a multitude of causes which result in either a deficiency of parathyroid hormone (PTH) or decreased responsiveness to PTH. Intracranial calcifications are frequently observed in various pathologic states ranging from genetic syndromes to infectious or metabolic causes. However, bilateral and symmetrical basal ganglia calcifications have a more limited etiological origin. Among these are both pseudohypoparathyroidism and primary hypoparathyroidism. Chronic hypocalcemia from these various etiologies has been known to result in ectopic calcium deposition. While the exact mechanism has yet to be elucidated; histopathological studies have demonstrated the formation of calcium-phosphate deposits. Despite its rarity, basal ganglia calcification should be considered in the differential of patients presenting with extrapyramidal symptoms or new onset movement disorders.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #55 Category: Clinical Vignette

Program: McLaren Regional Medical Center/MSU Flint
Program Director: Parul Sud, MBBS, FACP
Presenter: Vishal Devarkonda
Additional Authors: Dr. Kesari

Acquired Hemophilia and Step-Wise Approach to Diagnosis

Introduction: Acquired hemophilia is one of the rare and fatal bleeding diatheses with an estimated mortality rate of > 20%. Acquired hemophilia was found to affect around two per million. Early diagnosis is required to prevent mortality. We present a case, with a step-wise systemic approach for diagnosis.

Case Presentation: 36-year-old female with history of hypertension, non-ischemic cardiomyopathy, and CKD presented with painful right thigh swelling, intermittent epistaxis, easy bruising for one month. Examination is suggestive of right thigh hematoma. Labs showed hemoglobin: 3.9g/dl, Platelets: 284,000, APPT: 101.1, PT/INR: 10.7/1.01, Reticulocyte count: 9.19%, LDH: 267 U/L, Haptoglobin <8 mg/dl, Indirect coombs test: Negative, peripheral smear: Normocytic normochromic anemia. Mixing studies pointed towards factor deficiency with possibility of presence of weak inhibitor. Later, Factor VIII assay was <5. Repeat Mixing studies indicated a factor inhibitor. She was successfully treated with blood transfusion, recombinant VIIa, and oral steroids.

Discussion and conclusion: Acquired hemophilia is caused by either factor inhibitor or increased clearance of clotting factors. It occurs more commonly in elderly and during post-partum period, but up to 50% of the reported cases remain idiopathic. No predilection to any ethnic group. One should suspect acquired hemophilia in a patient with an elevated APTT, or presence of large hematoma or extensive ecchymosis without any significant trauma. For accurate diagnosis one should follow a step wise approach including CBC, CMP, PT/INR, aPTT, hemolytic work up, appropriate use of mixing studies and factor assays. Early diagnosis is crucial as treatment would prevent morbidity and mortality.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #56 Category: Research

Program: McLaren Regional Medical Center/MSU Flint
Program Director: Parul Sud, MBBS, FACP
Presenter: Sakiru Isa
Additional Authors: Oluwole Adegbala, Olajide Buhari, Mahin Khan, Oyebimpe Adekolujo, Orimisan Adekolujo, Mustapha Hassan, Ahmad Munir

Impact of Obstructive Sleep Apnea on In-Hospital Outcomes of Patients with Non-ST Elevation Myocardial Infarction

Introduction: Obstructive sleep apnea (OSA) is one of the most common breathing disorders. There are debates about the impact of OSA on in-hospital outcomes of patients with acute coronary syndromes. We studied the National Inpatient Sample (NIS), the largest publicly available all-payer inpatient healthcare database in the United States to determine the relationship between OSA and the in-hospital mortality of patients admitted with non-ST elevation myocardial infarction (NSTEMI).

Methods: We included subjects aged 18 years or older with NSTEMI in the NIS from September 2010 to September 2015. Subjects were categorized into those with OSA and those without OSA. The primary outcome was in-hospital mortality. We used propensity score matching to compare clinical outcomes between the two groups. Logistic regression models were created to determine the relationship between OSA and in-hospital mortality.
RESULTS: There were 1,984,432 patients with NSTEMI in the study; 123,551(6.23%) of them had OSA while 1,860,881(93.77%) did not. Patients with OSA were younger (64.59 years versus 69.28 years, absolute standardized difference {ASD} 0.36) and more likely to be white (71.74% versus 68.83%, ASD 0.14). In-hospital mortality was significantly lower in the OSA group than the group without OSA (2.61% versus 3.53%, adjusted odds ratio 0.73 {95% CI, 0.66-0.81}). The mortality benefit was present irrespective of gender categories, age groups, and revascularization modalities.

CONCLUSION: In patients with NSTEMI, in-hospital mortality was lower in the group with OSA compared to patients without OSA. Plausible explanations for this finding include repeated hypoxic episodes leading to “ischemic preconditioning”.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #57 Category: Clinical Vignette

Program: Mercy Health Grand Rapids/MSU
Program Director: Mark Spoolstra, MD, FACP
Presenter: Shahroz Adil
Additional Authors: Eric Santos, MD

Primary Small Cell Carcinoma of Esophagus: A Rare Entity

Primary Small cell carcinoma of the esophagus (PSCCE) is a rare and aggressive malignancy. The lung is the most common site for small cell carcinoma (SCC). Extrapulmonary small cell carcinomas account for 2.5-5% cases. Incidence of PSCCE is 0.1%-2.4% of all esophageal cancers. We describe a case of PSCCE in a young man who presented to the Emergency department (ED) for the evaluation of dysphagia. A 37-year-old man with a past medical history of hypertension, smoking, and alcohol presented to the ED with dysphagia to solids and associated 13 pounds weight loss for 3 months. Chest CT angiography showed circumferential mass at the level of the carina, esophageal thickening, and enlargement of adjacent lymph nodes. Endoscopy showed necrotic mass 7 cm below upper esophageal sphincter. CT neck showed right para-tracheal lymphadenopathy. MRI brain was negative for metastasis. CT abdomen/ pelvis showed enlarged epigastric adenopathy. Biopsies showed poorly differentiated small cell carcinoma of the esophagus and cells were positive for CD-56 and synaptophysin. Positron emission tomography did not show distant metastasis. The patient was treated with etoposide, carboplatin, and Tecentriq. After 5 cycles, Tecentriq alone was used as maintenance. Repeat Imaging showed a decrease in tumor size. We report the first ever case of PSCCE being treated with Tecentriq. Tecentriq is immunotherapy approved for Lung SCC with Etoposide and Carboplatin. Surgery, chemotherapy, and radiotherapy were used in the past but due to a limited number of cases and lack of controlled trials and large studies, definitive treatment is not well established.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #58 Category: Clinical Vignette

Program: Mercy Health Grand Rapids/MSU
Program Director: Mark Spoolstra, MD, FACP
Presenter: Michael Davis
Additional Authors: Allie Eickholtz, Nasir Khan, MD

Eruptive Xanthomas as a Warning Sign for Uncontrolled Hypertriglyceridemia

Severe hypertriglyceridemia can lead to a number of adverse sequelae. In particular, when triglyceride levels become greater than 1000 mg/dL, patients can develop cutaneous manifestations in the form eruptive xanthomas as well as develop acute pancreatitis. Our patient is a 38 year old male who presented to the hospital with worsening right upper quadrant pain and lack of appetite over the course of 1 week. Over the course of the month prior to his abdominal pain, the patient described progressive development of yellow papules on red bases clustered over his extensor surfaces as well as scattered over his trunk, face, and hairline of his scalp. On presentation to the hospital, patient was found to have a triglyceride level >3000 mg/dL, lipase of 169 U/L, and CT abdomen/pelvis findings of acute pancreatitis. The patient was initially treated with an insulin drip which was unsuccessful. He subsequently underwent one round of plasmapheresis which decreased his triglyceride level to 457 mg/dL. Within two days of decreasing his triglyceride level to below 500 mg/dL, his eruptive xanthomas rapidly decreased in number. The patient's pancreatitis slowly improved over the course of the week with supportive care. This patient case demonstrates the development of eruptive xanthomas as both a warning sign of worsening triglyceride levels and as a clue to a possible underlying primary dyslipidemia, the rapid resolution of eruptive xanthomas with the lowering of triglyceride levels, and hypertriglyceridemia as an important cause of acute pancreatitis.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #59 Category: Clinical Vignette

Program: Mercy Health Grand Rapids/MSU
Program Director: Mark Spoolstra, MD, FACP
Presenter: Michael Essenmacher
Additional Authors: Rehana Siddiqi, MD; Kamran Ilyas, MD; Mark Spoolstra, MD

Eisenmenger's Physiology Treated with Fenestrated Atrial Septal Defect Device Currently Not Yet Approved by USFDA

Congenital septal defects, left unrepaired, can lead to bi-directional shunting and cause the triad of cyanosis, pulmonary hypertension, and erythrocytosis that defines Eisenmenger's physiology. Patients often decline with frequent hospitalizations for right heart failure. Eventually, patients will require a heart-lung transplantation. Unfortunately, many patients die before receiving transplantation. A fenestrated atrial septal defect device is currently used in Europe to provide symptomatic relief and reduce hospitalizations until transplant is available. This case presents a 65 year-old female with congenital atrial septal defect. Due to Qs/Qp of 2:1, she was not a candidate for ASD repair. She developed pulmonary hypertension with right ventricular remodeling and bi-directional shunting with Eisenmenger's physiology. Initially treated with riociguat and macitentan and escalated to treprostenil and epoprostenol. Unfortunately, she continued to decline requiring 8L oxygen. Over a two month span she had four hospitalizations for right heart failure. During the fourth hospitalization she was evaluated for transplant. In a multi-disciplinary effort, a FASD device was imported from Italy and placed for compassionate use. The patient's Qs:Qp returned to 1:1. In the following weeks her oxygen was reduced to 2L and functional status significantly improved. A repeat echocardiogram showed significant reduction of right ventricular pressures.

This case illustrates the natural course of an unrepaired ASD and the current treatments available to prevent progression. It highlights the possibility FASD devices, not currently approved by the USFDA, to provide symptomatic relief and prevent recurrent hospitalizations for patients waiting for heart-lung transplants or those who are not candidates for transplantation.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #60 Category: Clinical Vignette

Program: Mercy Health Grand Rapids/MSU
Program Director: Mark Spoolstra, MD, FACP
Presenter: Kyle Jurayj
Additional Authors: Jurayj, Kyle M.D., Qaiser, Iman M.D., Khan, Nasir M.D., Spoolstra, Mark M.D.

Atovaquone "Won't Be Gone" : The Revenge of the Rash

77-year-old female with diastolic CHF and anemia of chronic disease who presented on 4/13-25 with right foot drop, jaw claudication, and fatigue for 4 months. On admit, she was found to have an AKI, and worsening anemia. The work-up included a temporal artery and left renal biopsy. Labs revealed positive p-ANCA/MPO, and renal biopsy showed necrotizing vasculitis. She was diagnosed with microscopic polyangiitis with pauci- immune glomerulonephritis. She was started on prednisone 60 mg daily and given 1 dose of IV rituximab every 2 weeks. Due to her sulfa allergy, she was discharged on atovaquone for PCP prophylaxis.

On 5/05-17, she was readmitted with an acute maculopapular, non-blanching pruritic rash extending across her torso and upper extremities concerning for atovaquone reaction or worsening of her vasculitic process. Initially, she was continued on prednisone 60 mg daily, but with no improvement, we increased the dose to IV methylprednisolone 125 mg , and added famotidine and Atarax. Left lower extremity skin biopsy showed findings consistent with a drug reaction. Atovaquone was held. She was discharged on prednisone 60 mg daily and dapsone 100 mg daily for PCP prophylaxis.

Atovaquone has a well documented side effect profile, with skin rash being highest on the list (22% to 46%)2. While it's main usage having decreased over the years with the near eradication of malaria in the United States, alternative uses for the drug are becoming more prevalent in the setting of PCP prophylaxis in AIDS patients1. Hence, recognizing its side effects will prove important once again.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #61 Category: Research

Program: Michigan State University - East Lansing
Program Director: Supratik Rayamajhi, MD, FACP
Presenter: Mark Terence Mujer
Additional Authors: Varunsiri Atti, Shiva Shrotriya, Samanjit Kandola, Ardy Fenando, Nisraj Basnet, Supratik Rayamajhi

Concomitant Renal Sympathetic Denervation with Pulmonary Vein Isolation vs Pulmonary Vein Isolation Alone

Concomitant renal sympathetic denervation with pulmonary vein isolation vs pulmonary vein isolation alone among patients with drug-resistant atrial fibrillation and hypertension: a meta-analysis

Background: Currently, there is limited data regarding the impact of adjunctive renal sympathetic denervation (RSDN) with pulmonary vein isolation (PVI) in hypertensive patients with atrial fibrillation (AF).

Methods: A comprehensive literature search for studies comparing RSDN+PVI vs. PVI - alone for AF and history of hypertension until January 1st, 2019 was performed. The results were expressed as risk ratio (RR) for the categorical variables and mean difference (MD) for the continuous variables with 95% confidence intervals (CIs).

Results: A total of 6 eligible (4 randomized and 2 prospective non-randomized) studies consisting of 432 patients (306 paroxysmal AF, 126 persistent AF) were included (RSDN+PVI group-186 patients and PVI group-246 patients). Follow up ≥1 year. Compared with PVI, RSDN+PVI significantly decreased the risk of AF recurrence RR 0.58, 95% CI (0.47 - 0.72, $p<0.00001$) on follow up. Fluoroscopy [MD +5.53 min. 95% CI (0.76 - 10.31, $p=0.02$] and procedure time [MD +34.85 min. 95% CI (23.55 - 46.16, $p<0.00001$)] was significantly longer with the PVI+RSDN group compared with PVI-alone. There were no significant differences in complications between both groups. Test of heterogeneity was low for all clinical outcomes ($I2=0\%$).

Conclusion: Our meta-analysis demonstrates that RSDN as an adjunct to PVI appears to be safe and improves clinical outcomes in both paroxysmal and persistent AF and history of hypertension

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #62 Category: Research

Program: Michigan State University – East Lansing
Program Director: Supratik Rayamajhi MD, FACP
Presenter: Abdullah Al-Abcha
Additional Authors: Ahmad Alratroot, Sherif Elkinany, Kenneth Rosenman, Ling Wang, Mary Jo Reilly

Occupational Asthma Secondary to Cobalt Exposure: Characteristics of Michigan Workers

Cobalt can have an adverse health effect on the heart, lungs, and skin. Workers exposed to cobalt may develop two lung conditions, asthma or lung fibrosis (hard metal lung disease). There is a relative lack of awareness among health practitioners in the United States of the risks and the burden of lung disease from work exposure and more specifically from cobalt exposure.

We had a total of 34 patients from a population-based surveillance program in Michigan over the last two decades. 27 of them were males (77%), 34 of them were white (97.1%) and 22 subjects (62.9%) had a history of smoking cigarettes. Only three had a history of asthma prior to cobalt exposure and half of them reported using personal protective equipment. Symptoms worsened during work shifts in 26 workers (74.3%), and remitted away from work in 28 workers (80%). All workers had sought medical treatment since starting the job (100%); 14 (40%) had emergency department visits and 10 (28.6%) had been hospitalized for breathing problems. Spirometry had been performed for 33 subjects (94.2%) and only 13 (37.1%) of them were informed by a doctor that their asthma was work-related. Half of our patients were workers manufacturing metalworking machinery.

Occupational Asthma secondary to cobalt occurs in workers from different industries. Manufacturing Metalworking Machinery was the most common. Most of the patients were unaware of their medical diagnosis and as reflected by the frequent ED visits and hospitalizations, OA secondary to cobalt was associated with significant morbidity and high cost.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #63 Category: Clinical Vignette

Program: Michigan State University – East Lansing
Program Director: Supratik Rayamajhi MD, FACP
Presenter: Thamer Almalki
Additional Authors: Abdullah Al-abcha MD. , Ikponmwosa Enofe MD. , Adesuwa Olomu MD.

Unusual presentation of Median Arcuate Ligament Syndrome with Compression of the Superior Mesenteric Artery in a Male

Median Arcuate Ligament syndrome (MALS) is a rare condition caused by external compression of the celiac artery by the median arcuate ligament. Classic symptoms are usually those of chronic mesenteric ischemia. It occurs more in thin female than males in a ratio of 4:1. Rarity and non-classic presentation of this disease makes its diagnosis challengeable. Exclusion of other causes and Imaging are the mainstay to diagnose.

A 53-year-old male who has been admitted multiple times in one year due to recurrent abdominal pain, nausea, and vomiting that have been worsening lately and becoming more severe after eating. He was treated for erosive gastritis, however his pain persisted after normal subsequent EGDs. Labs showed elevated lactate. CTA abdomen showed a severe compression of the celiac artery (83% stenosis) by the median arcuate ligament with post-stenotic dilatation with worsening during expiration (97% stenosis) and prominent narrowing of the Superior Mesenteric artery 73%. Most of the MALS cases in the literature were present typically in females and with compression of the celiac artery alone. However, presentation of MALS in a male and association of the superior mesenteric artery compression making it very unusual. Our patient was referred to a tertiary center for possible surgical intervention given his underline HFrEF with LVEF of 23%.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #64 Category:

Program: Michigan State University – East Lansing
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #65 Category: CQI/EBM

Program: Sinai Grace Hospital – DMC
Program Director: Mohamed Siddique, MD, FACP
Presenter: Ayman Abulawi
Additional Authors: Rana Ismail, PhD; Marcel Eadie, MD; Aaron Greenberg, DO; LaTorya Ellison, MD; Ghadeer Fatani, MD; Zena Abd-Alahad

Hospitalization of Patients with Syncope Secondary to Orthostatic Hypotension: Length of Stay Investigated

Introduction: phase 1 examined patient who presented with syncope and analyzed the most common etiologies with focus on patients with orthostatic hypotension. In phase 2, the study examined orthostatic hypotensive cases only who were managed in the ED or on the floor. Objective: the study aims to examine length of stay for patient's with orthostatic hypotension and the testing that takes place in the hospital.

Methods: Each phase includes 100 patients, from SGH and DRH. The study is retrospective from 11/2018 to 05/2019.

Results:
Phase 1 (syncope cases with different etiologies) - inpatient only
–The mean length of stay(LOS); orthostatic hypotension 3.7 days, neurogenic etiologies 5.41 days, cardiogenic etiologies 4.34 days.
–Tests for orthostatic hypotensive cases; transthoracic echocardiogram 85%, head CT scan 75%, carotid ultrasound 25%.
Phase 2 (orthostatic hypotensive cases) -ED versus inpatient
–LOS: 1.25 days for emergency department patient's/observation. 2.9 days for inpatient admission
–Orthostatic vitals checked: Observation/ED 63%. In patients 57%
–Transthoracic echocardiogram OBS/ED 58%. Inpatient 54%
–CT had: OBS/ED 34%. And patient 58%
Carotid ultrasound: OBS/ED 12.5%. Inpatient 27%

Conclusion: We found that there is an excessive length of stay for orthostatic hypotensive case with that can be decreased as well as unnecessary in hospital testing which can increase cough and lymph. Based on the guidelines by ACC/AHA task force patients with orthostatic hypotension without risk factors such as cardiac disease among others should have a full history, appropriate physical exam, EKG, should not stay more than 24 hours and discharged home after fluid replacement.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #66 Category: Clinical Vignette

Program: Sinai Grace Hospital – DMC
Program Director: Mohamed Siddique, MD, FACP
Presenter: Anand Agarwal
Additional Authors: Paramveer Singh MD (Resident), Ghadeer Fatani MD (Resident), Ismail Rana PhD, MSc. , Ahmad Ahmad DO and Wasif Hafeez MD

An Atypical Presentation of Clostridial Anaerobic Cellulitis

Introduction:
Clostridium perfringens is a gram-positive anaerobe. Its spectrum of disease can vary from self-resolving gastroenteritis to life-threatening necrotizing fasciitis. A lesser-known and rarely seen disease manifestation is clostridium perfringens induced gangrenous cellulitis.

Case Description:
A 60-year-old gentleman presented with left arm swelling and pain as well as generalized abdominal pain and vomiting which started after eating “fried chicken.” Left-arm duplex confirmed deep venous thrombosis of the left subclavian and internal jugular vein, thought to be provoked by recent intravenous cannulation. We started Heparin drip via the right hand. On day 3, the patient developed multiple tense fluid- filled bullae on the right forearm. The patient was afebrile with no mucosal or genital involvement and a negative Nikolsky sign. A detailed review of the medication list could not determine a culprit. Lactic acid was 4. Blood cultures were drawn, and we took a skin biopsy. We started the patient on pulse steroid therapy. The patient was eventually transferred to a higher medical center for plasmapheresis. On day 5, the biopsy results confirmed toxic epidermal necrolysis and Clostridium perfringens grew in the anaerobic bottle of blood culture. Consequently, we adjusted the treatment and the patient received Ceftriaxone and Clindamycin. Gradually, the patient’s skin condition stabilized and lactic acidosis resolved.

Discussion:
Rarely Clostridium perfringens manifests as gangrenous cellulitis. The differential includes cellulitis caused by Vibrio vulnificus and group A streptococcus. Given the unusual presentation, a high degree of suspicion will aid in early diagnosis and treatment.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #67 Category: Clinical Vignette

Program: Sinai Grace Hospital – DMC
Program Director: Mohamed Siddique, MD, FACP
Presenter: Ahmad El Alayli
Additional Authors: Patrick Yousif, Marc Feldman

Pasteurella Multocida Leading to Septic Shock in an Immunocompromised Patient with an Open Wound

Introduction:
With the high prevalence of pet cats and dogs in the US households, zoonotic infections transmitted through these animals represent an important healthcare hazard. Pasteurella multocida represents the most common isolated organism among the approximately 300,000 emergency yearly visits that are due to animal bites. Although most of these are localized infections, cases of septic shock have been reported in the literature albeit being extremely rare.

Case description:
An 84 year old African American gentleman with history of radiation therapy for prostate cancer and diabetes mellitus type 2 presented for acute altered mental status. On presentation, he was febrile and soon became hypotensive requiring resuscitation with fluids followed by intravenous vasopressors. He was started on empiric antibiotics. A few days later, patient's mental status was back to baseline. His blood cultures grew Pasteurella multocida. Upon further questioning, patient reported having a pet dog at home. As he had an open wound on his right lower extremity, inoculation of the wound with the dog's saliva was suspected as the portal of entry. The patient did well and was discharged home on IV ceftriaxone to complete his antibiotic course.

Discussion:
Immunocompromised patients are at increased risk of complicated infections with Pasteurella multocida. Having an open wound can make these patients an especially vulnerable population. Counselling these patients about taking precautions when in close proximity to animals known to have potential for transmission of zoonotic infections could be an important step in limiting severe infection with these organisms.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #68 Category: Clinical Vignette

Program: Sinai Grace Hospital – DMC
Program Director: Mohamed Siddique, MD, FACP
Presenter: Anam Kamal
Additional Authors: Kennedy Iheanacho MD (Resident); Heba Mahmoud, DO; Rana Ismail, PhD, MSc; Marc Feldman, MD

A Deceiving Presentation of Pyogenic Meningitis with Resultant Stroke

Introduction

Meningitis classically presents with headache, fever and nuchal rigidity; however, headache with fever alone is often enough for a presumptive diagnosis. It is less likely to suspect meningitis when encephalopathy and unilateral deficits are the only presenting symptoms. In most cases, a work-up for cerebrovascular accident (CVA) would ensue.

Case Presentation

A 56-year-old female presented obtunded with right-sided hemiplegia and tachycardia. Her labs were significant for leukocytosis, lactic acidosis and UA positive for bacteria and nitrites. CT head was unremarkable. Treatment for CVA was initiated but there was also a concern for sepsis with possible urinary source. She was empirically started on Cefepime and Vancomycin with intravenous hydration. Despite these measures, her clinical status remained unchanged. She became febrile and suffered an episode of status-epilepticus. Subsequently, antibiotics were changed to include Ceftriaxone and Ampicillin for suspicion of meningitis. Cerebrospinal fluid analysis expressed neutrophilic-predominance and blood cultures grew S.pneumoniae. A brain MRI supported left pyogenic meningitis with resulting infarctions. Her treatment was switched to culture-directed antibiotics with supportive anti-epileptic therapy. She required a prolonged ICU stay with mechanical ventilation and was discharged to ex tended care facility with a tracheostomy and peg.

Discussion

Whenever a patient presents with clinical signs of CVA and septic features, pyogenic meningitis should be suspected and care initiated accordingly. Strokes that may arise as complications of bacterial meningitis can confuse clinicians away from the culprit. Upfront therapy with IV steroids followed by Ceftriaxone and Vancomycin immediately after CSF and blood cultures may avoid disastrous sequelae.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #69 Category: Clinical Vignette

Program: Sinai Grace Hospital – DMC
Program Director: Mohamed Siddique, MD, FACP
Presenter: Aparna Lakshminarasimhan
Additional Authors: Niveditha Mudgegowdra MD, Wasif Hafeez MD, Camelia Arsene, MD, PhD, MHS

Cryptococcal Meningitis Presenting as Diplopia

Introduction: Cryptococcal meningitis is a potentially fatal fungal opportunistic infection affecting immunocompromised patients. It affects 957,900 people worldwide every year. Most common symptoms are fever, malaise, headache, photophobia, and vomiting. Diplopia, as one of the presenting features, is not as commonly seen as these other symptoms.

Case Description: A 37 year old female with known history of HIV, not on HAART, was admitted with complaints of double vision, headache, photophobia and sinus congestion. On examination the patient had left sided deviation on right eye lateral gaze. Magnetic resonance venography ruled out cavernous sinus thrombosis. Lumbar puncture was done with CSF analysis which was positive for Cryptococcal meningitis. The patient received Liposomal Ampho-B 5mg /kg IV q 24 hrs + 5-Flucytosine 25mg/kg PO q 6 hrs for 14 days, followed by 6-8 weeks of high dose Fluconazole, and secondary prophylaxis. Her symptoms improved after the initiation of antifungals.

Conclusion: Diplopia is not one of the common presenting features of Cryptococcal meningitis. This was an interesting case due to its rare presentation with this symptom. Complications arise due to failure to recognize symptoms of raised intracranial pressure and start treatment in a timely manner. The mechanisms behind raised intracranial pressure are not clearly defined although clogging of arachnoid villi by Cryptococcus and subsequent reduction in resorption of CSF is thought to be one of the reasons.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #70 Category: Clinical Vignette

Program: Sinai Grace Hospital – DMC
Program Director: Mohamed Siddique, MD, FACP
Presenter: Mahesha Makandura
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Rare Case of Cryoglobulinemic Vasculitis Affecting Kidney

Introduction: Cryoglobulinemic vasculitis (CV) is a rare small-vessel vasculitis involving the skin, joints, and other organs, including the kidneys. Hepatitis C virus (HCV) is the most common cause, and to a lesser extent, autoimmune conditions such as Rheumatoid Arthritis (RA) can cause CV.

Case Description: A 69-year-old female, with a history of RA was evaluated for renal failure. She had Boutonniere's and Swan neck deformities of both hands, but no skin lesions. Kidney biopsy showed crescentic glomerulonephritis that was suspicious for cryoglobulinemia. Her C4 level came back low at <8 compared to moderate to average C3 level. Rheumatoid Factor and CCP levels were positive, so was her ANA. Also, her ANCA and ds-DNA were negative but had a Cryoglobulin index at 2%. Immunofixation electrophoresis showed mixed polyclonal immunoglobulins. HCV and HIV testing were negative. These findings were consistent with CV affecting kidneys due to underlying RA. She was treated with IV Solumedrol and discharged to start Rituximab as out-patient.

Discussion: This is a compelling case that demonstrates how RA can be a cause of CV affecting kidneys without the involvement of other organ systems such as skin. Kidney biopsy and lab values such as reduced C4 levels to normal C3 levels can assist in differentiating CV from other vasculitic conditions like lupus nephritis. Treatment consists of targeting the underlying condition and using immunosuppressive medications. In a patient with CKD and a history of autoimmune disease, it is essential to rule out cryoglobulinemia even in the absence of skin lesions.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #71 Category: Clinical Vignette

Program: Spectrum Health/MSU
Program Director: Talawnda Bragg, MD, FACP
Presenter: Ojobumijo Agbaji
Additional Authors: Brett Begley,MD ; Ayman Alboudi,MD ; Reda Girgis, MD

The Tale of the Orphan Lungs

Pulmonary veno-occlusive disease (PVOD) is a rare form of pulmonary hypertension with an estimated prevalence of 1-2 cases per million individuals. It is characterized by destruction of pulmonary venules leading to increased pulmonary vascular resistance and severe right heart failure. Patients have characteristic findings on high resolution computed tomography (HRCT) and severely decreased diffusion capacity (DLCO) on pulmonary function testing(PFT). Risk factors include cumulative tobacco exposure, EIF2AK4 gene mutations, and exposure to organic solvents such as trichloroethylene. Lung transplant is the only definitive treatment. We present a 76-year-old male with a history of smoking who presented with exertional dyspnea and weight gain. He had worked in an automobile factory for 30 years. Exam revealed right heart failure and echocardiography showed severe right ventricle dilation with a RVSP of 83mmHg. CT failed to demonstrate emphysema and PFT showed a restrictive pattern with severely decreased DLCO 31%. HRCT showed centrilobular ground glass opacities, mediastinal lymph node enlargement, and thickened interlobular septae. He was aggresively diuresed and trialed on inhaled veletri and sildenafil leading to worsening hypoxia. Patient was not a candidate for lung transplant and passed away shortly after. Trichloroethylene(TCE) is an organic solvent used for degreasing metals. Interestingly, our patient likely had significant exposure during his career on the automobile manufacturing line. It has been shown that over 40% of sporadic cases of PVOD reported organic solvent exposure, mainly TCE. This report should encourage further epidemiologal and experimental studies to understand the mechanisms of pulmonary vascular remodeling in cases of PVOD.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #72 Category: Clinical Vignette

Program: Spectrum Health/MSU
Program Director: Talawnda Bragg, MD, FACP
Presenter: Ronak Chhaya
Additional Authors: Maximiliano A. Tamae Kazaku

Interstitial Lung Disease: A Rare Case Linked to Immunodeficiency

Introduction:
Granulomatous and lymphocytic interstitial lung disease (GLILD) is a non-infectious complication of common variable immunodeficiency (CVID). This restrictive lung disease occurs in 10-20% of CVID patients and associated with significant morbidity and mortality. Typical presentation occurs between 20 – 50 years old. Patients may present with recurrent sinopulmonary infections, dyspnea and splenomegaly. Unlike sarcoidosis, lower lungs are predominantly affected. Treatment with combination chemotherapy of Azathioprine and Rituximab has demonstrated improvement of pulmonary function and radiographic abnormalities. We describe a case of hypogammaglobulinemia with delayed diagnosis of CVID and GLILD.

Case Presentation:
A 50 year old female with history of 25-pack year tobacco use, severe COPD and hypogammaglobulinemia diagnosed in adolescence without immunology follow up. She had frequent hospitalizations for bacterial pneumonia. CT thorax showed honeycombing and bilateral cysts. Open lung biopsy was consistent with ILD with non-necrotizing granulomas. Treatment included long term high-dose steroids, methotrexate and empiric antibiotics. Azathioprine was briefly trialed with questioned compliance. She subsequently presented unresponsive secondary to hypoxemia. CVID was diagnosed on flow cytometry and IVIg was initiated. Rituximab was recommended following clearance of pneumonia. She was unable pass SBT after intubation and required tracheostomy. She was a poor candidate for lung transplant and passed away shortly thereafter.

Discussion:
GLILD is an uncommon complication of a rare disease with no current treatment guidelines. Combination chemotherapy has some documented benefit. Patients have underlying immunodeficiency and risk frequent infections, delaying initiation of immunosuppression. Earlier identification of CVID and optimization for transplant may improve patient outcomes, as in this case.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #73 Category: Clinical Vignette

Program: Spectrum Health/MSU
Program Director: Talawnda Bragg, MD, FACP
Presenter: Patricia Choi
Additional Authors: Nicholas Hartog, M.D.

CTLA-4 Haploinsufficiency Masquerading as CVID

Cytotoxic T-lymphocyte antigen-4 (CTLA-4) is an inhibitory receptor constitutively expressed on regulatory T cells (Tregs). Tregs have a critical role in immune system suppression and self-reactivity. CTLA-4 functions by binding CD80/86 of antigen presenting cells. CTLA-4 haploinsufficiency leads to a syndrome of immune dysregulation and lymphoproliferation.

A 56 year old female with history of common variable immunodeficiency on intravenous immunoglobulin replacement, Evan's syndrome, late-onset T1DM, hypothyroidism, gastric adenocarcinoma, hepatosplenomegaly, and autoimmune enteritis was admitted with fatigue, malaise and hemoglobin of 5.7 g/dL. Genetic testing revealed a heterozygous variant in CTLA-4 (c.223C>T; p.R75W) consistent with a diagnosis of CTLA-4 haploinsufficiency. Shortly after, she was re-admitted with acute decompensated liver failure. Liver biopsy 5 years earlier showed nodular steatosis, but she also had a significant history of alcoholism, so etiology of cirrhosis was unclear. She had further pulmonary decompensation and CT scan of chest revealed diffuse interstitial consolidations and infiltrates. She initially responded to pulse dose steroids, but relapsed and decision was made to withdraw care.

Currently there are >400 monogenetic causes of immunodeficiency and knowledge of a precise genetic defect can significantly change and help personalize treatment. Medications such as abatacept exist that can help replace CTLA-4 and give further personalized care based on a patient's specific genetic defect. Delay in personalized care negatively impacts the clinical course in these patients. Identification of an autosomal dominant disease allows for further familial diagnosis and treatment. Ascertaining the specific monogenetic variant in immunologic disease is critical as treatment modalities differ significantly.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #74 Category: Clinical Vignette

Program: Spectrum Health/MSU
Program Director: Talawnda Bragg, MD, FACP
Presenter: Asaf Harris
Additional Authors: Aaron Salem, MD | Talawnda Bragg, MD

Subcutaneous Soft Tissue Mass Biopsy: A Safer Approach to Diagnosing Lung Cancer

A tissue sample is required for diagnosis and staging of malignancy. Consideration of biopsy location and modality must weigh risks vs benefit. Common biopsy sites in suspected lung cancer include lungs, lymph nodes, and typical areas of metastatic disease such as liver, bone, and adrenal glands. Bronchoscopy with endobronchial ultrasound is the most common modality, followed by imaging directed needle biopsy of intrathoracic or distant lesions. Less invasive than surgical biopsy, these modalities still present significant risks including pneumothorax and respiratory failure, especially in patients with advanced lung disease.

We present the unusual case of an aggressive small cell carcinoma diagnosed by core biopsy of a suprascapular soft tissue nodule. A 66 year old male with fifty pack years smoking history, sixty pounds unintentional weight loss and worsening chest pain presented to the emergency department. Physical exam was remarkable for a new subcutaneous nodule on the right scapula. Imaging demonstrated severe emphysematous changes in both lungs and a 7.2 cm right lower lobe mass with lymphadenopathy, as well as pleural and adrenal lesions.
We obtained an ultrasound-guided biopsy of the right scapular nodule, with histopathology conclusive for metastatic squamous cell carcinoma. Though soft tissue metastases in lung cancer are rare, clinicians should remain vigilant as a detailed physical examination can provide substantial advantage through identification of a low-risk biopsy site. Interestingly, two recent case reports describe solitary right scapular soft tissue lesions as initial presentation of primary lung cancer, though those represented adenocarcinoma and poorly differentiated large cell carcinoma.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #75 Category: CQI/EBM

Program: Spectrum Health/MSU
Program Director: Talawnda Bragg, MD, FACP
Presenter: Diane Kuehl
Additional Authors: Shahid Mohammed, MD, David VanDyke, MD, Salar Alam, MD, Ashley Parent, MD

A Quality Improvement Study: Updating the Inpatient Problem List

Introduction

The problem list is one of the methods physicians use to provide meaningful care for patients. It provides patients with individualized care by using the problem list to guide clinical decision making and also facilitate physician to physician care of patients. Unfortunately, at discharge the problem list is not always updated leading to overall poor patient management and transfer of care.

Methods

Initially, a survey was sent to Spectrum's outpatient primary care physicians to evaluate if they were satisfied with the problem list on discharge. We were able to utilize epic to graph if our residents were meeting the goal for updating patient list at discharge. For 2 months, a prospective analysis of the three inpatient resident teams was completed.

Results

The survey showed that the majority, 38.46%, were somewhat satisfied with the inpatient problem list at discharge. In addition, epic system analytics revealed that our teams were significantly below the goal of 80% as we were updating our problem list 55% of the time. Results from our prospective analysis after 2 months revealed that the problem list was updated 59% on team 1, 48% team 2, and 82% on team 3.

Conclusion

Maintaining a problem list that is up-to date is one issue many physicians face. The problem list seeks to facilitate continuity of patients within inpatient and outpatient services as well as among physicians in various specialties. Accurate problem lists will better guide the care of patients by providing a communication vehicle throughout our healthcare system.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #76 Category: Clinical Vignette

Program: St. Joseph Mercy - Ann Arbor
Program Director: Patricia McNally, MD, FACP
Presenter: Momena Sohail
Additional Authors: Steven Allen MD, Shellenberger A. Richard DO (Attending).

A Unique Presentation of Cutaneous Vasculitis on Bilateral Breast Tissue

Introduction

Cutaneous vasculitides are small or medium vessel vasculitis involving the skin traditionally presenting as purpuric or petechial lesions on the lower extremities. Cutaneous vasculitis of the breast is only reported in a few case reports, usually associated with underlying malignancy. We report a case of a young woman with bilateral breast vasculitis without malignancy.

Case description:

21-year-old healthy Caucasian women presented with progressive left-to-right spreading of bilateral breast discoloration, tenderness, and swelling despite oral antibiotic therapy. Exam revealed markedly tender, enlarged, and edematous bilateral breasts with a focus of purpura on the right breast and reddish-purple discoloration involving 90% of the left breast. Concerning findings for malignancy, notably inflammatory breast cancer, included flatted nipples and periareolar peau d'orange with underlying 10 x 10 cm mass to palpation on the left. Antibiotics were broadened while awaiting biopsy results. Core biopsy of the left breast mass and right breast skin biopsy revealed medium vessel and small vessel leukocytoclastic vasculitis, respectively. She was treated with methylprednisolone with subsequent improvement in symptoms. Oncologic workup was negative.

Discussion:

Cutaneous vasculitis has varied clinical manifestations posing a diagnostic challenge for clinicians as it may mimic infection initially. Accurate identification and diagnosis of cutaneous vasculitis relies upon early biopsy and is of vital importance due to its association with multiple underlying disorders including malignancy which necessitates appropriate work up. Documentation of unique presentations of vasculitides help clinicians in their identification, prompt earlier biopsy for accurate diagnosis and prevent unnecessary antibiotic use and investigations.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #77 Category: Clinical Vignette

Program: St. Joseph Mercy – Ann Arbor
Program Director: Patricia McNally, MD, FACP
Presenter: Mohammad Ali Al Mahdawi
Additional Authors: Richard Shellenberger DO, Anupam Suneja MD

Rare Case of HLH Manifested as AIHA Presentation

Introduction:
Hemophagocytic lymphohistiocytosis (HLH) is a rare and potentially fatal autoimmune condition resulting from uncontrolled activation of T lymphocytes and macrophages. Most cases are familial or acquired. Acquired HLH may result from infections, autoimmune conditions, immunodeficiencies and malignancies.

Description:
A 36 year-old female was admitted with fever, two weeks of diarrhea from jejunal pouchitis and sudden onset of jaundice. She had a history of autoimmune hemolytic anemia (AIHA) one year prior which was steroid responsive and had been in remission. Admission laboratories were significant for a hemoglobin 11.2, WBC 26.9, LDH 1522, reticulocyte 3.2% and indirect bilirubin 13.9. Intravenous corticosteroid was started. Peripheral blood smear and direct antiglobulin test confimed AIHA. Hemolysis didn't improve despite coritcosteroids so bone marrow biopsy was performed on hospital day 4. HLH was a concern with the presence of rapidly progressive renal failure, acute hepatitis and a significantly elevated ferritin (10,500). Bone marrow biopsy showed evidence of hemophagocytosis. Natural killer cell activity was absent which support the diagnosis of HLH. After beginning hemodialysis, rituximab was instituted.

Discussion:
We presented an unusual case of AIHA associated with acquired HLH and severe but reversible renal failure. Autoimmune diseases and infections are both known causes of acquired HLH. Success in treating acquired HLH is dependent on treating the underlying condition which results in autoimmune activation. Our patient may have had her pouchitis result in concomitant AIHA and HLH. This association has rarely been reported and may lead to a better understand of the pathophysiology of HLH

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #78 Category: Clinical Vignette

Program: St. Joseph Mercy – Ann Arbor
Program Director: Patricia McNally, MD, FACP
Presenter: Niranjana Chellappa
Additional Authors: Darrell Craig, MD

Getting a HaNDL on Things – Is It a Stroke? Is it Meningitis? Or Is It a Benign Headache Syndrome?

The Syndrome of Headaches, Neurological Deficits and CNS Lymphocytosis (HaNDL) is a rare cause of Migraine-like headaches more commonly seen in the young male. The presentation can vary from the transient headache to a catastrophically elevated intracranial pressure. We present a case of this uncommon, likely under-diagnosed condition.

A 23-year-old male presented to the ED with the abrupt onset of “worst headache of his life.” This was associated with waxing and waning right-sided numbness, paresthesias, transient confusion, slurred speech, diminished right-sided handgrip and a left lower facial droop. A CT head, CTA neck, MRI brain were all unremarkable. Lumbar puncture showed lymphocytes in the CSF without organisms; Cultures were negative, as were a comprehensive viral panel, West Nile Virus antibodies, Borrelia IgG/ IgM and HSV testing. Empiric dexamethasone, acyclovir, ceftriaxone and vancomycin did not result in clinical improvement. The headache persisted with acetaminophen, NSAIDs, opiates and Oxygen, but did respond noticeably to sumatriptan. The patient was discharged with resolution of symptoms on hospital day 2. Patient returned to the ED three days after discharge with similar symptoms, with symptom relief with intravenous valproate.

HaNDL is a diagnosis of exclusion and is the likely explanation in this patient with recurrent non-infectious migraine-like headache. The prognosis is excellent. Keeping this in the differential would be beneficial as these patients could often be subjected to repeated radiation, invasive testing, antimicrobial therapy or even stroke prophylaxis, when all they had was a rather dramatic headache.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #79 Category: Clinical Vignette

Program: St. Joseph Mercy – Oakland
Program Director: Geetha Krishnmoorthy, MD, FACP
Presenter: Israa Al-Gburi
Additional Authors: Amreetpal S. Sidhu MD, Dalia Aziz, S. Mao, Ali Najar MD

Concurrent Nivolumab-Induced Acute Hepatic and Renal Failure: A Case Report

Nivolumab is an anti-PD-1 monoclonal antibody that was initially approved for the treatment of melanoma and then adopted in the management of other malignancies. Treatment-related adverse events (AEs) have been spread over many organ systems but have mostly been low-grade and successfully managed with supportive care.

CASE-DESCRIPTION

An 80-year-old lady with metastatic intraocular melanoma was started on bi-weekly nivolumab after recurrent metastasis. She presented with pruritus, jaundice and abnormal LFT following three doses. Lab work was significant for hyperbilirubinemia up to 25 mg/dL and elevated liver enzymes. INR was 3.70. BUN and Cr measure up to 69 and 4.62 mg/dL respectively and a prior normal baseline. CT abdomen showed acute, moderate hepatomegaly without any distinct lesions. Ultrasound showed no biliary ductal dilatation or abnormality. A viral hepatitis panel was negative. Despite extensive supportive measures she continued to deteriorate and was transitioned to comfort care.

DISCUSSION

Nivolumab and related PD-1 inhibitors have revolutionized therapies for PD-L-1 positive malignancies. However, the resultant increase in T-cell activity is not confined to anti-tumour effects and can manifest as auto-immunity. Studies showed most high-grade AEs have iresolved with dose delay or permanent discontinuation--with or without concurrent systemic corticosteroids or other immunosuppressants. We present a unique case of severe, concurrent, nivolumab-induced, acute hepatic failure and anuric nephritis in a patient with no prior history of hepatic or renal impairment prior to initiation of therapy.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #80 Category: Clinical Vignette

Program: St. Joseph Mercy – Oakland
Program Director: Geetha Krishnmoorthy, MD, FACP
Presenter: Priyadarshini Dixit
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Choleperitoneum Due to Gastric Perforation Masquerading as Acute Pancreatitis in a Roux-en-Y Gastric Bypass Patient

INTRODUCTION

Nearly 100,000 patient undergo Roux-en-Y gastric bypass (RYGB) annually for weight loss. After RYGB, bile acid may reflux into the gastric remnant resulting in inflammation and occasionally perforation. Our patient, with RYGB, was initially diagnosed with pancreatitis. When she did not improve, subsequent investigations revealed gastric perforation and Choleperitoneum. Physicians should keep in mind the complications of weight loss surgery when evaluating abdominal pain.

CASE DESCRIPTION

A 68year old lady with RYGB presented with sudden onset sharp, continuous, 8/10, epigastric pain radiating to the right upper quadrant with no nausea/vomiting. Vital signs were unremarkable. Her abdomen was not distended. Bowel sounds were present. There was tenderness on palpation in the epigastric region. Labs demonstrated WBC 14,800/mm3, AST 12 U/L; ALT 21 U/L; amylase 1,761 U/L, and lipase 926 U/L. Pancreatitis was suspected. CT demonstrated a small volume of ascites, but no fat stranding or inflammation of the pancreas. The patient did not improve. Repeat CT demonstrated a large volume of ascites. Analysis of ascitic fluid revealed WBC 4/mm3; albumin 1.1 g/dl with SAAG 0.9g/dl; and total bilirubin 7.5 mg/dl. Choleperitonitis was diagnosed. Emergent laparotomy revealed a gastric perforation of the remnant stomach.

DISCUSSION

Choleperitoneum is presence of bile in the peritoneum. An ascitic fluid bilirubin concentration greater than 6 mg/dl with an ascitic fluid/serum bilirubin ratio greater than 1.0 is diagnostic. Amylase and lipase may be elevated. Choleperitoneum due to gastric perforation is a rare presentation. Physicians should modify their differential diagnosis of abdominal pain in bariatric surgery patients.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #81 Category: Clinical Vignette

Program: St. Joseph Mercy – Oakland
Program Director: Geetha Krishnmoorthy, MD, FACP
Presenter: Ahmed Haq
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Acute Hydrocele Due to Acute Pancreatitis. Watch Out for Testicular Necrosis!

Introduction:
Well-known complications of acute pancreatitis include pseudocyst, necrotizing pancreatitis, acute renal failure, acute respiratory distress syndrome and ascites. Pancreatic hydrocele is an overlooked differential when evaluating acute scrotal swelling in patients with acute pancreatitis. A rare complication of pancreatic hydrocele is accumulation of inflammatory pancreatic ascites in the scrotum causing infection and/or testicular necrosis.

Case report:
A 33-year-old male with alcohol abuse disorder presented with epigastric abdominal pain radiating to his back and elevated lipase levels. Acute alcoholic pancreatitis was diagnosed. Abdominal ultrasound showed peripancreatic fluid with hepatic steatosis. Chest X-Ray did not show pleural effusion. He was given IV fluids and morphine. Two days later, he developed acute abdominal and scrotal swelling. He experienced dull pain along spermatic cord and physical exam showed hydrocele, with no erythema, pain on palpation, high riding testicles, mass, or hernia. His abdominal and scrotal edema resolved by day six. A scrotal duplex ultrasound was obtained and revealed no scrotal or testicular abnormalities.

Discussion:
Pancreatic hydrocele secondary to acute pancreatitis is caused by pancreatic fluid tracking into the scrotum. This fluid initially tracks through weak fascial planes in the retroperitoneum, travels along the anterolateral surface of psoas muscle draining through the inguinal canal and an un-obliterated processus vaginalis and finally accumulates in the scrotum where it can cause infection and testicular necrosis. When patients with acute pancreatitis develop scrotal swelling, it is pertinent to have pancreatic hydrocele as a differential diagnosis. Testicular infection and necrosis must also be ruled out in such patients.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #82 Category: Clinical Vignette

Program: St. Joseph Mercy – Oakland
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Succeessful Catheter Directed Thrombolysis of Massive Bilateral Upper Extremity DVT Presenting as SVC Syndrome

Introduction

Superior vena cava syndrome (SVCS) usually occurs due to malignancies, but intravascular devices cause 20-40% of SVCS. No specific guidelines exist to manage catheter-induced SVCS. Treatments include percutaneous transluminal angioplasty, stenting, thrombolysis, mechanical thrombectomy, and venous grafting. We present a patient with central venous catheter-associated SVCS, who failed anticoagulation, percutaneous angioplasty, and mechanical thrombectomy and eventually responded to ultrasound-assisted catheter-directed thrombolysis (Ekos).

Case report

A 54-year-old man who was on monthly plasmapheresis through a right internal jugular vein tunneled catheter for Hashimoto's encephalitis, presented with facial swelling and dyspnea for 3 days. His face and neck were swollen with erythema. CT Chest: Thrombus at the tip of the catheter. Intravenous heparin started and the catheter removed. 2 days later, severe dyspnea lead to intubation and mechanical ventilation. Repeat CT chest: Superior vena cava occlusion. Aspiration thrombectomy and angioplasty of SVC were performed. Apixaban was started. Subsequently, bilateral arm swelling developed. Ultrasound revealed thrombus in the right internal jugular vein, thrombi in bilateral axillary and right subclavian veins. He was started back on heparin drip. Ekos thrombolysis with alteplase was performed. Venogram revealed complete resolution of thrombi. He was restarted on apixaban.

Discussion

Several case reports and small studies suggest endovascular treatments as the first line for thrombus associated SVCS. Systemic thrombolysis can cause major bleeding. Stent placement gives symptom relief but can cause infection, pulmonary embolism, stent migration, and SVC rupture. Current literature shows promising results with Ekos thrombolysis. Stent placement and angioplasty can be reserved as adjuvant therapy.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #83 Category: Clinical Vignette

Program: St. Mary Mercy Hospital – Livonia
Program Director: David Steinberger, MD, FACP
Presenter: Randa Abd Algayoum
Additional Authors: Dr. Yasir Farah, Dr. Naik Harmesh

A Case of Non-BRCA Genes Ataxia Telangectasia Mutated Pathogenic Variant Positive Breast Carcinoma

Ataxia-telangiectasia mutated gene regulates the DNA damage response and cell cycle checkpoints. Heterozygous ATM mutations occur in about 1-2% of the population and appears to increase breast cancer risk compared to the general population by approximately two to five-fold. The increased availability of comprehensive genetic testing, allows better identification of moderate risk genes, for which the penetrance and implications are not yet well defined. We present to you a case of a healthy young female with early onset BRCA negative breast cancer, that was found to harbour a pathogenic ATM variant.

A 37 year old Caucasian female of Ashkenazi decent, with no significant past medical history and no family history of breast or ovarian cancer, presented with a painless mass in her right breast. Breast ultrasound and bilateral diagnostic mammograms revealed a 2.5 cm asymmetry, architectural distortion and calcification. Ultrasound guided biopsy was consistent with grade II invasive lobular carcinoma. Tumor cells tested Estrogen receptor positive, PR and Her 2/neu negative. Genetic testing was positive for a pathogenic mutation in ATM gene and a variant of unknown significance in CDH1, and negative for BRCA1and BRCA2 genes. Patient underwent prophylactic bilateral mastectomy with reconstruction.

Most clinical guidelines lack recommendations specific to this population. Early screening initiation and preventative measures should be considered given the high life time risk of breast cancer associated with this mutation. This case outlines the challenging interpretation of mutations in the ATM gene, and the lack of evidence based guidelines to guide physicians in their clinical management and plan of care.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #84 Category:

Program: St. Mary Mercy Hospital – Livonia
Program Director: David Steinberger, MD, FACP
Presenter:
Additional Authors:

Abstract Withdrawn

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #85 Category: Clinical Vignette

Program: St. Mary Mercy Hospital – Livonia
Program Director: David Steinberger, MD, FACP
Presenter: Zarak Khan
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Epstein-Barr Virus Associated Stroke: A Cursed Kiss

Introduction:
Stroke as a complication of acute Infectious mononucleosis (IM) has only been reported twice in literature. We report what could be a similarly rare case of stroke associated with Epstein-Barr virus (EBV) induced transient antiphospholipid antibody syndrome (APS).

Case Description:
58 year old male with no past history presented to ED with 2 weeks of fever. Initial work up was significant for elevated liver function tests. CT scan of the abdomen demonstrated hepatosplenomegaly. On the night of admission, patient developed left facial droop and and left upper extremity weakness. MRI of the brain showed acute infarction in the operculum of the right frontal lobe. Further work-up was significant for elevated EBV IgM (>160 units/mL), elevated serum EBV PCR (117659 copies/mL) and Anticardiolipin IgM levels (13.2 MPL). Rest of the stroke workup was negative. Patient was managed conservatively and was discharged on Apixaban for APS. Subsequent labs on follow-up showed normal anticardiolipin antibodies 7 weeks later. Patient has not experienced any more episodes of stroke.

Discussion:
Antiphospholipid antibody syndrome and subsequent stroke are not the commonly anticipated complications of seemingly benign infectious mononucleosis. To our knowledge, this is the first reported case of Ischemic Stroke associated with EBV induced transient APS. Previously a similar case was reported with CMV infection. Prothrombotic state from transient APS with no other risk factors for a stroke makes it the likely culprit in our case. We believe our case highlights the possibility of this rare yet fatal complication of EBV associated illness.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #86 Category: Clinical Vignette

Program: St. Mary Mercy Hospital – Livonia
Program Director: David Steinberger, MD, FACP
Presenter: Chirag Kher
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My Infection Is Killing My Stomach: Urosepsis Causing Gastric Ischemia

Introduction: Gastric ischemia is a rare condition associated with poor prognosis typically presenting with abdominal pain, GI bleed and altered mentation and may be caused due to states of shock. We present a rare case of gastric ischemia due to urosepsis.

Case Presentation: A 70 year-old male with past medical history of peripheral vascular disease, chronic Foley catheter and dementia presented with altered mentation, hypotension, tachycardia and decreased urine output. The Foley catheter was replaced revealing purulent urine. Initial labs revealed acute kidney injury, lactic acidosis, and leukocytosis. CT abdomen pelvis without contrast revealed gastric pneumatosis with adjacent left upper quadrant portal venous gas and branching portal venous gas throughout the liver.

Esophagogastroduodenoscopy was performed which showed proximal gastric ischemia and necrosis from the midbody to the fundus; biopsies revealed acute hemorrhagic gastritis, and gastroenterology recommended resection. General surgery was consulted who recommended conservative management. Patient improved clinically while receiving antibiotic therapy, intermittent nasogastric tube suction, intravenous proton pump inhibitor therapy and parenteral nutrition. Repeat imaging showed resolution of portal gas and gastric pneumatosis and repeat EGD showed resolution of gastric ischemia.

Discussion: Gastric ischemia is a serious condition which is under-recognized clinically. Etiologies include systemic hypotension, vasculitis or disseminated thromboembolism. Gastric pneumatosis or portal venous gas on imaging suggest ischemia; EGD with biopsy is the diagnostic gold standard. Gastric ischemia is either managed surgically or medically with fluid resuscitation, nasogastric tube placement to prevent gastric distension and acid reduction along with antibiotics for patients with gastric pneumatosis.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #87 Category: Clinical Vignette

Program: St. Mary Mercy Hospital – Livonia
Program Director: David Steinberger, MD, FACP
Presenter: Tejveer Singh
Additional Authors: John Iljas, Preeti Misra

Omental Infarct: A Rare Case of Acute Abdomen

Introduction: Omental infarct is a rare cause of acute abdomen due to vascular compromise of greater omentum. This condition has a nonspecific clinical presentation with right lower quadrant being the most common and managed conservatively.

Case: 35 y/o male with history of hypertension and GERD presented to the emergency department with chief complaint of right lower quadrant pain which started 3 days ago without any precipitating event. Abdominal CT with contrast showed significant inflammation in the right side of the abdomen likely representing omental infarct. On call general surgeon was consulted who suggested no acute surgical intervention and patient to be managed medically with antibiotics. On call vascular surgeon was consulted; advised there was no immediate need for anticoagulation as there was no evidence of acute vascular issues such as embolization and/or dissection involving the celiac or the superior mesenteric arteries. Following day, the patient improved clinically and was discharged with total of 10 days of antibiotic treatment and to follow-up outpatient with general surgeon.

Discussion: Omental infarct is a rare cause of acute abdominal pain. A diagnosis of primary/idiopathic omental infarct is made when no identifiable etiology is determined. Secondary causes include hypercoagulability, vasculitis, abdominal adhesions, cysts, and tumors. Other contributing factors include obesity, local trauma, heavy food intake, coughing, sudden body movements, laxative use, and hyperperistalsis. Imaging may show focal area of fat stranding, swirling of omental vessels, omental torsion, and/or hyperdense peripheral halo. This disease is often self-limiting and managed conservatively. Complications such as abscess can occur which may require drainage.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #88 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Hammad Ali
Additional Authors: Syed Umer Mohsin, M.D. M.P.H; Marvin Kajy, M.D.; Nabil Al-Kourainy, M.D.; Muhammad Usama, M.D.; Shaun Cardozo, M.D.

Focal Variant of Takotsubo Cardiomyopathy as Neurocardiogenic Injury After Subarachnoid Hemorrhage

Neurocardiogenic stunning has been described in the literature as a cause of left ventricular dysfunction, commonly referred to as Takotsubo cardiomyopathy (TTC). Growing evidence suggests catecholamine induced microvascular spasm or direct toxicity as the cause. TTC has several variants, our case highlights the lesser known focal TTC.

We present a 52-year-old gentleman with history of hypertension diagnosed with diffuse subarachnoid hemorrhage (SAH) and cerebral edema, without ventricular involvement. The patient initially received mannitol and hypertonic saline in the emergency department. External ventricular drain was subsequently placed by neurosurgery. Further imaging revealed an aneurysm of the anterior communicating artery which was treated endovascular coiling. Cardiac assessment was remarkable for non-specific T wave abnormalities on ECG as well as troponin elevation. Echocardiogram (TTE) revealed reduced ejection fraction (EF) 35-40% with focal anterior and inferior septal akinesis. Percutaneous intervention was contraindicated due to concomitant SAH. The patient was managed with metoprolol, chosen for its anti-catecholamine effect. Troponins trended down and initial ECG changes resolved. Repeat TTE a week later showed complete resolution of focal akinesis and return to normal EF.

Neurocardiogenic stunning is a transient triad of left ventricular dysfunction, ECG changes and elevated cardiac enzymes. Distinguishing focal TTC from acute coronary syndrome is crucial because the medical management and follow up are distinct. Ischemic work up should not preclude the prompt initiation of cardio-protective medications in the appropriate clinical setting. Close follow-up for resolution of transient cardiac dysfunction is recommended.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #89 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Salina Faidhalla
Additional Authors: Hammad Ali, Jie Chi, Nabil Al-Kourainy, Jarrett Weinberger

Right-Sided Thoracic Empyema, a Rare Complication of Appendicitis

Thoracic empyema secondary to intra-abdominal pathology is a rare complication but reported in literature. It can be seen post appendicitis, appendiceal rupture and laparoscopic appendectomy. Rarely thoracic empyema can be the initial presentation of appendicitis.

We report a patient with thoracic empyema post laparoscopic washout for appendicitis. A 61-year-old male with a past medical history of atrial fibrillation and heart failure with reduced ejection fraction. He presented with chest pain and palpitations, found to have atrial fibrillation with a rapid ventricular response. Initial workup revealed leukocytosis and right-sided pleural effusion on chest x-ray. The pleural effusion was initially attributed to decompensated heart failure. Upon failure of response to intravenous diuretics, a thoracentesis was performed and revealed exudative fluid, which grew intestinal flora on culture. However, the patient had no signs, symptoms or radiological findings suggestive of pneumonia. A chest tube was placed and empiric broad-spectrum antibiotic therapy was initiated, which was later de-escalated based on susceptibility results. Given that no source of infection was identified, a detailed chart review was done and revealed recent hospitalization at an outside hospital for acute appendicitis, treated with diagnostic laparoscopy and washout. Tissue cultures (from washout) grew similar species to those found in the patient's pleural fluid cultures. Appendicitis was most likely the source of empyema.

Physicians should be aware of thoracic empyema as a possible complication of appendicitis in the perioperative period. Vice versa abdomen should be carefully evaluated when patients develop thoracic empyema without parenchymal lung disease.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #90 Category:

Program: Wayne State University – Detroit
Program Director:
Presenter:
Additional Authors:

Abstract Removed

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #91 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Sohaip Kabashneh
Additional Authors: Diane L. Levine ; Hassan Abubaker ; Hammad Ali

I Feel Cold , I Need Fuel!

Hypoglycemia is a common side effect of insulin therapy. Hypothermia is a recognized manifestation of severe hypoglycemia, that physicians don't routinely encounter. We report a patient who developed hypothermia as a result of severe hypoglycemia. The patient is a 68 year old woman with past medical history significant for insulin dependent diabetes, end stage renal disease on dialysis, coronary artery disease and congestive heart failure. She was brought to the hospital after being found unresponsive. on presentation her temperature was 32.5 Celsius orally, and her blood glucose was 22 mg/dl. The patient woke up gradually and became alert and oriented after she was given 100 ml of 50% dextrose. She was admitted to medical ICU for management. Her blood glucose was maintained at above 120 mg/dl , her temperature started to increase gradually. Within 7 hours her temperature normalized to 36.5 without active warming. The patient explained that she continued to take her insulin despite a decrease in oral intake. Other causes for hypothermia were unlikely. The patient presented on a warm day with ambient temperature of 28 Celsius. She was not on any medication known to cause hypothermia. Although she had ESRD she was getting dialysis regularly. Thyroid and adrenal functions were normal. The patient does not drink alcohol. Hypoglycemia has been reported to cause hypothermia. This case report serves to highlight hypothermia as a recognized complication of severe hypoglycemia which all physicians should be aware of especially in patients presenting with hypothermia in warm weather.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #92 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Dana Kabbani
Additional Authors: Nabil Al-Kourainy, Manmeet Singh

Transformation from Non-Small-Cell Lung Cancer to Small-Cell Lung Cancer: An Uncommon Phenomenon in EGFR-Wild-Type Tumors

Transformation from non-small-cell lung cancer (NSCLC) to small-cell lung cancer (SCLC) is a rare histological finding. The frequency of documented transformation from adenocarcinoma to SCLS in non- epidermal growth factor receptor (EGFR) mutant cancers is low. Current research suggests transformation is more common in lung cancers that have EGFR-activating mutations than in EGFR-wild-type tumors. To add to this growing body of research we present a case of a 44-year-old-man with SCLC who presented to the hospital with status epilepticus. MRI brain revealed metastatic disease, and the patient underwent parietal craniotomy for tumor resection. Pathology of the metastatic brain lesion was significant for NSCLC, non-EGFR mutant type, with squamous features. The patient subsequently underwent whole brain radiation. Shortly after radiation therapy, he presented to the hospital with left-sided hemiparesis, secondary to disease progression. Repeat biopsy was obtained for confirmation of the primary diagnosis, and again revealed SCLC. Recent literature has challenged the commonly held belief that SCLC and NSCLC have distinct genomic origins. This claim has been strengthened by reports of NSCLCs with mutated EGFR regressing to SCLC, particularly in the setting of tyrosine kinase inhibitor resistance. Based on current studies, patients with SCLC with transformation should be treated with standard therapies for SCLC. Future studies are needed to determine standards of therapy based on patient response and to identify the subsets of NSCLC that are most likely transform to SCLC.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #93 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Zaid Kaloti
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Cerebellar Ataxia: An Unusual Presentation of Well Known Disease

Introduction:
The clinical manifestations of Legionnaires' Disease are predominated by respiratory symptoms, however extra-pulmonary manifestations have been described. Neurologic symptoms such as headache and confusion are well known; however, cerebellar symptoms are rare, yet potentially devastating complications of Legionnaires' disease. We present a case of Legionnaires' disease complicated by severe cerebellar ataxia.

Case Description:
A 60-year-old male construction worker with history of chronic kidney disease, and alcohol abuse presented to the hospital with a chief complaint of new-onset gait instability. Patient also described subjective fevers, pleuritic chest pain, productive cough, and diarrhea. Neurologic exam was significant for bilateral upper extremity tremors, pronator drift, positive Romberg sign, and a wide-based gait. Chest x-ray revealed lobar consolidation. Legionella urine antigen was positive, and Legionella Pneumonia was diagnosed. Lumbar puncture was unremarkable. Patient was admitted for seventeen days, treated with levofloxacin and supportive care. Pulmonary symptoms resolved. The patient's neurologic symptoms improved however he still had significant gait instability and difficulties with fine motor tasks at time of discharge.

Discussion:
A review article published in 2004 described 29 cases of legionella manifesting as cerebellar dysfunction. Pulmonary symptoms preceded neurologic deficits in all but four patients. Our case is unique, as our patient's neurologic symptoms began the same day as his pulmonary symptoms, and were the predominant symptoms. It is reported that these neurologic manifestations may last up to 3 years. The mechanism of cerebellar dysfunction is unknown; endotoxin or immune-mediated mechanisms have been hypothesized.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #94 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Arslan Mahmood
Additional Authors: Aamer Javed, MD

A Case of Constrictive Pericarditis

A 58 year old male with past medical history of diastolic heart failure and limited AL amyloidosis of the tonsils, presented with progressive dyspnea on minimal exertion since 4 weeks. Examination revealed bilateral lower extremity edema. Vitals were stable and he was saturating at 99% on room air. Auscultation of the chest revealed pericardial rub in the left lower sternal border. EKG showed sinus rhythm. CT scan of the thorax showed pericardial effusion with pericardial thickening. Transthoracic echocardiogram showed mild pericardial effusion with dilated and plethoric inferior vena cava, septal shudder, and increased pericardial thickness consistent with constrictive pericarditis. Cardiac MRI or heart catheterization for invasive hemodynamics was recommended for further evaluation. Patient was obese, hence MRI was not feasible. Heart catheterization showed features of constrictive physiology. Therefore, the diagnosis of constrictive pericarditis was established. Baseline ESR and CRP were 56 and 60.8 respectively at baseline. Patient was started on oral ibuprofen 600 mg TID, colchicine 0.6 mg BID, and 40 mg prednisone. His shortness of breath improved. Cardiothoracic surgery was consulted prior to discharge to evaluate for possible pericardiectomy in the event of medical treatment failure. Repeat echocardiogram was scheduled 2-3 weeks post discharge to evaluate the response along with the inflammatory biomarkers levels for clinical improvement. Etiology of the pericarditis was likely due to amyloidosis of the heart. Results for the heart tissue biopsy taken during catheterization will be followed up in outpatient. This case highlights the systematic approach towards diagnosis and management of constrictive pericarditis.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #95 Category: Clinical Vignette

Program: Wayne State University – Detroit
Program Director: Jarrett Weinberger, MD, FACP
Presenter: Kalyan Sreeram
Additional Authors: Anita Choudhary MD, Vijendra Singh MD, Anupama Devara MD

Frequent Falls and Lost Feels: Vitamin B12 Deficiency Presenting as Orthostatic Hypotension

Pernicious anemia typically presents as macrocytic megaloblastic anemia. We report a case which presented initially as orthostatic hypotension in the absence of typical hematologic manifestations.

A 62-year-old man with HTN and poorly controlled DM was admitted for symptomatic orthostatic hypotension and multiple syncopal episodes. Symptoms started 6 months prior to admission with episodes of lightheadedness and dizziness most prominent on positional change from lying to standing. Each episode lasted for 5-6 minutes and led to nearly daily falls. Examination yielded orthostatic hypotension with supine BP of 128/86 and standing BP of 94/60 that persisted despite volume resuscitation. Neurological examination revealed positive Romberg sign, minimally decreased lower extremity pinprick sensation and fine touch, and decreased vibratory and position sense without foot drop. CBC yielded normal hemoglobin and MCV. Extensive workup to assess other causes of orthostasis including Tilt Table Testing, Pheochromocytoma, Adrenal Insufficiency, and Diabetes Insipidus revealed no abnormalities. Midodrine and Fludrocortisone were attempted as therapies but later discontinued as they worsened the hypertension without correcting the orthostasis. Eventually, Vitamin B12 level was checked and found significantly low to 115. Methylmalonic acid level was elevated to 779 and Parietal Cell antibodies were present. The patient received parenteral B12 replacement therapy, and the orthostasis objectively resolved upon 4 months of treatment with B12.

This case thus highlights a need to screen for Vitamin B12 deficiency in the presence of orthostatic hypotension and longstanding diabetic neuropathy, as Vitamin B12 deficiency may be under-investigated due to the presence of diabetic neuropathy.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #96 Category: Research

Program: Wayne State University – IM – Rochester
Program Director: Sarwan Kumar, MD, FACP
Presenter: Frederick Bittner
Additional Authors: Manishkumar Patel, Sourabh, Victoria Gonzales, Ankita Aggarwal, Kristen Hughes, Mohammad Fityan, Sarwan Kumar

Significance of Higher MAP After Inpatient Cardiac Arrest in Improving Neurological Outcome and Mortality

Introduction: The simultaneous need to perfuse the post-cardiac arrest brain adequately without unnecessary cardiac strain is unique to post-cardiac arrest patients. Current guidelines recommend avoiding a MAP <65mmHg, however, an optimal MAP goal remains unidentified.

Method: We conducted a retrospective chart analysis of patients suffering cardiac arrest in our hospital, achieving ROSC and surviving for at least 48 hours post-ROSC. Study population was divided into one group of patients maintained at a lower average MAP for 48 hours post-ROSC between 65 to 80mmHg and the second group maintained at a higher average MAP of >80mmHg. The primary outcome was presence of anoxic brain injury on EEG as an indicator of neurological outcome and mortality after 48 hours post-ROSC. Secondary outcome was the length of intubation.

Results: 18 patients met our inclusion criteria, of which 10 patients belonged to the higher MAP group and 8 to the lower MAP group. 40% mortality in the lower MAP group, compared to 12.5% mortality in higher MAP group ($p>0.05$) 48 hours post-resuscitation. Anoxic brain injury was 20% vs 12.5% in lower vs higher MAP group $p>0.05$). The mean length of intubation was also decreased in the higher MAP group vs lower MAP group. (3.5 vs 4.9, $p>0.05$).
Discussion: As cerebral perfusion is predominantly dependent on MAP, an elevated MAP could theoretically increase cerebral oxygen delivery. Our study found maintaining a MAP >80mmHg in post-cardiac arrest period had a tendency toward better neurological outcome, reduced length of intubation and improved mortality 48 hours post-cardiac arrest.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #97 Category: Clinical Vignette

Program: Wayne State University – IM – Rochester
Program Director: Sarwan Kumar, MD, FACP
Presenter: Monica Dhawan
Additional Authors: Monica Dhawan, Anubhav Jain, Pallavi Lakra

Chemotherapeutic Induced Thrombosis - a Devastating Relationship

Introduction: Malignancy is a hypercoagulable state, however chemotherapy also contributes to the risk of thrombosis. Case: A 65-year-old woman with high grade mixed endometrial carcinoma, underwent surgical resection within a month of diagnosis. A year later workup revealed enlarged right external iliac LN, biopsy positive for metastasis and round one of Carboplatin and Taxol chemotherapy was started. Hospital readmission followed soon after for dizziness and unsteady gait. CT head and MRI, were unremarkable for cerebrovascular insult. Echocardiogram and carotid ultrasound were negative for endocardiac and valvular disease, and no evidence of arrhythmias. While inpatient she became unresponsive, followed by transient right sided weakness and right facial droop. Stat repeat CT brain revealed interval development of acute ischemic changes of the left cerebellar hemisphere and follow up MRI confirmed extensive new acute infarcts in the posterior circulation involving the cerebellum. Based on small stroke burden, antiplatelet therapy with aspirin 325 mg, Plavix 75 mg and atorvastatin 40 mg was started. With improvement during inpatient rehab round two of chemotherapy was agreed upon. Inevitably she developed vertigo and headache, CT head demonstrated new eccentric lesions of the pons consistent with a recurrent cerebrovascular accident. With worsening symptoms and a decline in overall health resulting in loss of verbalization, and swallow capabilities she opted for comfort measures and hospice, ultimately expiring from cardiopulmonary arrest. Discussion- This case illustrates the potential of thrombotic complications with chemotherapeutic management. Thrombotic complications have been shown in association with specific chemotherapeutic agents, including l-asparaginase, mitomycin C, and cisplatin.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #98 Category:

Program: Wayne State University – IM – Rochester
Program Director:
Presenter:
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ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #99 Category: CQI/EBM

Program: Wayne State University – IM – Rochester
Program Director: Sarwan Kumar, MD, FACP
Presenter: Manishkumar Patel
Additional Authors: Gloria Hong, Ankita Aggarwal, Sana Chams, Jasmeet Bal, Zain Kulairi, Sarwan Kumar

Process to Improve Cardiac Telemetry Use in a Community Hospital

Rationale: Strict adherence to ACC/AHA guidelines for inpatient telemetry monitoring leads to a decrease in alarm fatigue and cost.
Aim: 50% decrease in inappropriate telemetry use in one year.
PDSA 1: We discovered that a telemetry order can be placed without selecting an indication. We integrated an ACC/AHA guideline-based list of indications into our EMR. Post-implementation review revealed no improvement in adherence due to the physician's ability to bypass this checklist.
PDSA 2: We provided educational sessions to IM residents to document telemetry alarms. 30% of charts had a documented indication, however, despite negative alarms during hospitalization, there was no telemetry discontinuation.
PDSA 3: Review of 50 patient charts showed 60% had no appropriate indication for telemetry continuation after 72 hours. We implemented an EMR pop-up appearing 72 hours post-initiation guiding physicians to renew telemetry order or discontinue if no longer indicated. Post-implementation review revealed 34% telemetry use was addressed by either renewing or discontinuing telemetry order, with only 10% telemetry discontinuation, as physicians could bypass the pop-up.
PDSA 4: Physician education sessions were conducted to emphasize telemetry indications and discontinuing inappropriate telemetry. Post-implementation review of 50 patients showed no further improvement in discontinuation of telemetry.
Conclusion: Our project has been successful in bringing attention to the overuse of telemetry and physicians are now required to select a telemetry indication when placing an order. However, once an indication is selected, the patients continue on telemetry throughout their hospitalization. Our next QI phase will focus on a nurse-managed telemetry discontinuation protocol.

ACP Michigan Chapter Scientific Meeting 2019

Friday Poster #100 Category:

Program: Wayne State University – IM – Rochester
Program Director:
Presenter:
Additional Authors:

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