SAN ANTONIO UNIFORMED SERVICES HEALTH EDUCATION CONSORTIUM (SAUSHEC) PRESENTS...

SOUTHWEST TEXAS ACP CONFERENCE

FRIDAY, SEPTEMBER 17, 2021

POSTER COMPETITION | ABSTRACT BOOKLET

Clinical Vignettes Breakout 2

Breakout #2 Agenda

13:15-13:20	Moderator Remarks		
13:20- 13:26	Sabhi Gull	UTRGV-KMC	2.1
13:26- 13:32	Shadi Jafari-Esfahani	UTRGV-KMC	2.2
13:32-13:38	Pooja Maknoor	UTRGV-KMC	2.3
13:38-13:44	Cesar Augusto Peralta	UTRGV VBMC	2.4
13:44-13:50	Ria Cabanero	UTRGV VBMC	2.5
13:50-13:56	Andres Adrianza	UTRGV VBMC	2.6
13:56-14:02	Sonia Iqbal	SAUSHEC	2.7
14:02-14:08	Rafaela Izurieta	SAUSHEC	2.8
14:08-14:14	Zachary Jarrett	SAUSHEC	2.9
14:14-14:20	Maria Leon-Camarena	Dell	2.10
14:20-14:26	Nimmy Thomas	Dell	2.11
14:26-14:32	Brooke Wagen	Dell	2.12

Presentation Number: 2.2

Category: Clinical Vignettes

Title: Diagnosis of Granulomatosis with Polyangiitis in a patient with complaint of fever and cough

First Author: Shadi Jafari-Esfahani

Additional Authors: Aref Qureini MD. MPHS.

Institution: U TX Rio Grande Valley Knapp Med

Abstract: Introduction:

Granulomatosis with polyangiitis (GPA) is an antineutrophil cytoplasmic autoantibody (ANCA)-associated vasculitis that predominantly affects small to medium-sized arteries. The Prevalence of GPA is from 2.3 to 146.0 cases per million persons.1 Clinical features includes non-specific symptoms including fever, malaise, weight loss, arthralgia, and more specific symptoms including cough, dyspnea, hemoptysis, and rhinosinusitis. 2 Clinical findings may include impaired kidney function such as proteinuria and hematuria.

Case Presentation:

A 65-year-old woman with past medical history of diabetes mellitus type 2, hypothyroidism, and hypertension presented with chief complaint of worsening cough for three weeks associated with fever, eye redness and photophobia. Prior to presentation, she received treatment for a presumed pneumonia. Labs demonstrated creatinine (1.1), GFR (49.8), and WBC of 15000. A chest radiograph demonstrated bilateral alveolar infiltrates and a chest CT revealed bilateral parenchymal infiltrate and pulmonary nodules. Subsequently, patient underwent CT guided biopsy of right upper lung nodule, and results were negative for cultures, AFB smear, KOH prep, and preliminary fungal cultures. Other labs included ESR (63), CRP (26.1), negative antinuclear antibodies (ANA), anti-dsDNA, rheumatoid factor, and antiproteinase 3 antibodies. Antimyeloperoxidase antibodies were elevated at 100. The preliminary pathology report of lung biopsy showed evidence of granulomas, necrosis, and vasculitis compatible with GPA. Patient was started on Prednisone 60 mg daily and discharged on stable condition to follow up with rheumatologist.

Discussion:

Diagnosis of GPA is often missed due to presentation of nonspecific constitutional symptoms.2 The morbidity and mortality associated with GPA is high due to irreversible organ damage caused by inflammation or because of intensive immunotherapy.3,4 Therefore, early diagnosis and induction therapy is of utmost importance. Chest radiograph and CT should be obtained in

all patients with respiratory symptoms suspected of having GPA. Diagnosis of GPA should be confirmed with biopsy of a tissue suspected of active disease.

References:

1. Kitching AR, Anders HJ, Basu N, et al. ANCA-associated vasculitis. Nat Rev Dis Primers 2020; 6:71.

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Presentation Number: 2.3

Category: Clinical Vignettes

Title: Bactrim induced BRASH syndrome in elderly female: A Case Report

First Author: Pooja Maknoor

Additional Authors: Ashika A. Chacko MD, Himabindu Kolli MD, Nevin Varghese MD

Institution: U TX Rio Grande Valley Knapp Med

Abstract: Background

BRASH syndrome is a clinical entity comprising of bradycardia, renal failure, AV blockade, shock, and hyperkalemia. It is a vicious cycle in which AV nodal blockers and hyperkalemia act synergistically to precipitate bradycardia in patients with renal dysfunction resulting in cardiovascular collapse.

Case Presentation

89-year-old lady with history of Stage 4 CKD, hypertension, and diabetes mellitus presented with worsening generalized body weakness. On medication review, she was recently started on bactrim for treatment of a foot ulcer. Other home medications included diltiazem, lisinopril and dulaglutide. Initial vitals were significant for pulse 34, BP 90/35 mmHg and RR 19. Patient appeared somnolent but arousable. EKG was significant for third-degree heart block. Pertinent labs included potassium 6.7 and creatinine 5.8. She was treated with IV fluids and pressors for shock. She received calcium gluconate, insulin, dextrose and sodium polystyrene in the interim, until she was started on emergent dialysis. Following two sessions of dialysis, EKG reverted to sinus rhythm with resolution of complete heart block. She was eventually titrated off pressors. She was discharged on scheduled dialysis and follow up in a nephrology clinic.

Conclusion

BRASH syndrome comprises of series of events that perpetuates itself. Caution should be exercised when prescribing bactrim as it might potentiate hyperkalemia, especially in patients with chronic kidney disease who are also on AV nodal blockers. Trimethoprim in Bactrim increases this risk by inhibiting potassium excretion from the kidneys. This could lead to a cycle of clinical events resulting in BRASH syndrome.

References:

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Presentation Number: 2.4

Category: Clinical Vignettes

Title: COMMON PREGNANCY COMPLICATIONS MASKING ACUTE LYMPHOCYTIC LEUKEMIA IN THE POSTPARTUM PERIOD.

First Author: Cesar Augusto Peralta

Additional Authors: Cesar Augusto Peralta, MD., Sonia Wadekar, BS., Khairiya Haj-yahya, BS., Laura Garcia,MD., Carlos Ramos, MD. Paul Bossous, MD.

Institution: Univ of Texas RGV VBMC Prog

Abstract: Acute lymphocytic leukemia (ALL) is a malignant neoplasm of immature lymphoid precursor cells that can arise in both healthy individuals, as well as those with inherited, genetic, or environmental risk factors1. While up to 28% of leukemia cases occur during pregnancy, there are very few cases of pregnancy complicated by ALL in the literature2. Therapy should be carefully arranged in a multidisciplinary approach for better fetal and maternal outcomes. Here, we describe a patient with no family history of cancer, no laboratory abnormalities suggestive of leukemia prior to her pregnancy, that presented with laboratories of blood dyscrasia characteristics.

A 29-year-old with a past medical history of spontaneous abortion, gestational diabetes, and intrahepatic cholestasis of pregnancy, was readmitted fifteen days postpartum for recurrent fevers. She subsequently underwent two unremarkable dilation and curettages for suspected retained placental products. Additionally, she was found to have splenomegaly and low fibrinogen but did not meet the criteria for Disseminated intravascular coagulation or HELLP syndrome. The patient's persistent symptoms eventually prompted a bone marrow biopsy, after which she was diagnosed with B-cell Acute Lymphocytic Leukemia. She was started on induction chemotherapy with hyper CVAD (cyclophosphamide, vincristine, doxorubicin, dexamethasone). Her hospitalization was complicated with neutropenic fever, requiring treatment with broad-spectrum antibiotics, antiviral and antimycotic regimens. The patient was regularly monitored until her absolute neutrophil counts improved.

This case illustrates pregnancy can mask the manifestations of otherwise devastating diseases3,4. It is possible that physio-pathological changes of pregnancy can alter presentations of underlying malignancies. Further, it is unclear if pregnancy may actually be protective against certain conditions, as the association between end-organ effects and pregnancy hormonal changes has not been properly studied. It is also possible that the observations in this event are coincidental. Further research is essential to determine if this association is actually clinically relevant.

References:

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Presentation Number: 2.5

Category: Clinical Vignettes

Title: ELEVATED INTRACRANIAL PRESSURE AS SOLE INITIAL PRESENTATION OF CRYPTOCOCCAL MENINGITIS

First Author: Ria Cabanero

Additional Authors: Raul Garcia, MD, Ralph Apolinario, MD, Ismael P. Polo Perez MD, Ria Cabanero MD, Carlos Ramos ,MD FACP, Laura Garcia, MD FACP

Institution: Univ of Texas RGV VBMC Prog

Abstract: Cryptococcosis is a widespread opportunistic fungal infection. It is thought to start with inhalation of fungal cells from the environment. On subsequent immunosuppression, it can disseminate to other tissues, most notably the CNS. Once established in the CNS, cryptococcosis causes an overwhelming infection of the meninges and brain tissue, frequently accompanied by raised intracranial pressure (IC)1. Symptoms of cryptococcal meningoencephalitis typically begin indolently with fever, malaise, and headache2.

33-year-old female patient with history of HIV infection presented with 7-day history of nausea, vomiting, and generalized weakness. The patient denied fever, chills, nocturnal sweating, and diarrhea. Vital signs and physical examination were unremarkable. CD4 count was ordered on admission. During her hospitalization, she developed new-onset right CN-VI, and right peripheral CN-VII palsy; C4 count results were 71 cells/mm3. A lumbar puncture (LP) was performed, showing an elevated opening pressure of 29 cmH2O, and Cryptococcus neoformans antigen, India Ink testing, and PCR were positive. The patient was started on liposomal amphotericin B, flucytosine and prophylactic trimethoprim/sulfamethoxazole. On the following days, she showed clinical improvement, nevertheless, she still presented nausea and 1-2 vomiting episodes/day. The patient required serial LPs for elevated IC pressure, ultimately needing a ventricular drain placement. She was restarted on triple antiretroviral therapy and was discharged on fluconazole consolidation therapy.

Approximately 6% of patients with AIDS develop cryptococcal infections, and AIDS-associated cryptococcosis accounts for 85% of all cases3,4. It is important to have a high index of suspicion for cryptococcal meningoencephalitis in patients with advanced HIV infection, especially with CD4 <100 cells/mm3, with indolent isolated symptoms, given that the classic characteristics of meningeal irritation may be absent in cryptococcal meningitis5. Diagnosing and treating early cryptococcal infections, with aggressive control of IC pressure, even with daily LPs if needed, allows for reduced mortality, and overall improved quality of life.

References:

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Presentation Number: 2.6

Category: Clinical Vignettes

Title: Mosquito Borne Acute Pancreatitis: A Complicated Dengue Hemorrhagic Fever Presentation

First Author: Andres M. Adrianza, MD;

Additional Authors: Henry Kwang, MD; Khairiya Hajyahya, MS4.

Institution: Department of Internal Medicine, UTRGV, Harlingen TX.

Abstract: Dengue Fever (DF) is a viral disease transmitted through Aedes mosquito bite. Life-threatening variations such as dengue hemorrhagic fever (DHF) and dengue shock syndrome can occur in up to 1-2% of individuals. Rarely, such cases involve development of myocarditis, encephalopathy, liver failure, splenic rupture, acute kidney injury, or acute pancreatitis (AP) as in our case.

A 47-year-old Hispanic male with medical history of hypertension and dyslipidemia, presented with abdominal pain for 6 hours, described as sharp, intermittent, located over his upper abdomen and radiated to his back with associated distention, nausea, and vomiting. He reported that 7 days before, he began to experience relapsing fevers, malaise, myalgias, arthralgias and recurrent epistaxis. Examination revealed epigastric tenderness and a morbilliform rash on his chest. Pertinent laboratories with leukocytes 10.8, platelets 64, sodium 129, creatinine 2.67, alkaline phosphatase 156, ALT 158, AST 180, lipase 5570, direct and total bilirubin 6.1, 7.4, respectively; Microscopic hematuria with red blood cells and bilirubinuria, unremarkable coagulation studies and negative hepatitis panel, HIV, drug screening, ethanol and acetaminophen levels. /Ultrasound revealed a normal gallbladder and bile ducts, while hepatomegaly, peripancreatic and perinephric stranding were seen on CT. Diagnosed with AP, he was placed NPO, started on intravenous fluids, analgesia and prophylactic doxycycline. His clinical status improved, kidney injury resolved and was discharged stable. Later, serology was positive for dengue IgM and IgG, 1.74, 9.42, respectively as well as positive Rickettsia IgG.
AP is a rare manifestation and diagnosis of exclusion in the setting of DHF. The characteristic clinical findings then confirmed with a fourfold increase in IgG and low IgM/IgG ratio indicated a recent secondary DF infection. In the US, clinician mindfulness of DF presentations and awareness for vector control measures should be raised, as cases raise especially in the high-risk southern states.

References:

1.Chen TC, Perng DS, Tsai JJ, Lu PL, Chen TP. Dengue hemorrhagic fever complicated with acute pancreatitis and seizure. J Formos Med Assoc. 2004;103:865–8.
2.Fernandez RJ, Vazquez S. Serological diagnosis of dengue by an ELISA inhibition method (EIM). Memórias do Instituto Oswaldo Cruz. 1990;85(3):347–351.
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Presentation Number: 2.7

Title: A Gut Busting Work Out: A Case of Colonic Ischemia Following High Intensity Functional Training

First Author: Sonia Iqbal

Additional Author: Geoffrey A. Bader

Institution: SAUSHEC

Introduction:

Colonic Ischemia is a common cause of lower gastrointestinal bleeding, especially among older hospitalized patients with underlying atherosclerotic disease. Patients often present with acute, transient abdominal pain followed by gastrointestinal bleeding, with the potential for serious complications or death. Colonic ischemia results from disruptions in mesenteric circulation, though specific causes are typically not identified. Exercise-induced colonic ischemia is a rare, but well described complication of strenuous or endurance exercise, even among younger individuals. Here we describe a unique case of exercise-induced colitis in a civilian following a high intensity functional training work out. Given the rising popularity of high intensity functional training work outs like Cross-Fit in the military population, it is critical military healthcare providers are aware of these potential complications.

Case Presentation:

A 69-year-old female with a history of polycythemia vera presented with a one day history of lower abdominal cramping and several episodes of moderate volume hematochezia after performing a high intensity functional training workout. On exam patient was hemodynamically stable and afebrile with a blood pressure of 149/82 mmHg, heart rate of 72, and a benign abdominal exam with without peritoneal signs. Laboratory testing showed a mild leukocytosis (12 $x10^9$/L), normal hemoglobin (14.8 g/dL) and platelets (337 $x10^9$/L), with normal electrolytes and renal function. Fecal guaiac was positive. Fecal calprotectin, infectious stool studies, and ESR were normal. High sensitivity-CRP was mildly elevated (9 mg/L). Computed tomography showed bowel wall thickening and adjacent fat stranding extending from the splenic flexure through the rectum. She underwent colonoscopy which demonstrated segmented regions of marked erythema, loss of vascularity, and non-bleeding ulceration in the descending, sigmoid, and rectum. Biopsies showed active colitis with no signs of chronicity. The cause of colitis was favored to be an acute, self-limited process, and she was managed with supportive care with resolution of symptoms. A repeat flexible sigmoidoscopy three months later showed complete resolution of colitis.

Discussion:

While gastrointestinal symptoms are common with intensive exercise, exercise-induced colonic ischemia is rare and has predominately been documented in endurance athletes, such as marathon runners. Pathophysiologic causes for exercise-included colonic ischemia include an increase in sympathetic tone, hyperthermia, hypovolemia, accumulation of vasoactive mediators, and shunting of blood from the mesentery. While traditionally “watershed” regions such as the splenic flexure have been thought to be most prone to ischemic events, any segment of the colon can be affected. Most cases of colonic ischemia resolve with bowel rest, intravenous fluids if hypovolemic or intolerant of oral intake, and monitoring for signs of complications such as infection or perforation. Military providers should remain vigilant for this potential etiology of colitis, particularly as high intensity functional training workouts have become popular in the active duty population.

Presentation Number: 2.8

Category: Clinical Vignettes

Title: Use of Bovine Hemoglobin in a Profoundly Anemic Jehovah's Witness Patient

First Author: Julia Timm Intili, DO

Additional Authors: Rafaela Izurieta, MD

Institution: SAUSHEC

Abstract: Introduction

When blood transfusions are declined secondary to religious reasons or unavailable in austere environments, there is a paucity of options to achieve improvements in hemoglobin in anemic patients. We present a case in which a patient with Waldenstrom Macroglobulinemia declined transfusions and was successfully treated with investigational bovine hemoglobin.

Case Description

A 70 year old otherwise healthy woman presented to the emergency department with several weeks of fatigue. Hemoglobin was found to be 3.9. While her anemia was evaluated on admission, she was offered blood transfusions, but declined as she is a practicing Jehovah's Witness. The patient was offered investigational bovine hemoglobin, which she accepted. She received 16 units in total of bovine hemoglobin during her hospitalization. Workup revealed a diagnosis of Waldenstrom Macroglobulinemia. Her hospital course was complicated by two ICU transfers. She experienced a stroke possibly related to the bovine hemoglobin versus profound anemia. Large pulmonary effusions accumulated secondary to efflux of the bovine hemoglobin requiring thoracenteses. She developed acute kidney injury and acute liver injury, which resolved with supportive care. After over a month in the hospital, the patient's hemoglobin stabilized to 9.0 and she was discharged home.

Discussion

Bovine hemoglobin is an alternative oxygen carrier to packed red blood cells with the same oxygen carrying capacity. It is stable at room temperature up to several years, it renders type and cross matching unnecessary, and can decrease need for vasopressors as it has colloidal properties similar to 6% albumin. In the United States, its use is investigational, however providers can apply for its use through the FDA's Expanded Access Program. Although our case demonstrates the potential pitfalls of bovine hemoglobin, its ultimate success in achieving a normalized hemoglobin and its aforementioned stability could render this therapy quite useful in austere environments such as the deployed setting.

References

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Presentation Number: 2.9

Category: Clinical Vignettes

Title: COVID-19 or Vaccine-Induced Cardiomyopathy: A Case Report of Severe Cardiomyopathy in an Active Duty Service Member Complicated by Recurrent Acute Ischemic Stroke

First Author: Zachary Jarrett, CPT, MC, USA

Additional Authors: Zachary S. Jarrett, CPT, MC, USA; R. Ethan Tomlinson, Capt, USAF, MC; Mayank P. Patel, Capt, USAF, MC; Michael S. Cahill, LTC, MC, USA

Institution: Brooke Army Medical Center, JBSA-Fort Sam Houston, Texas

Abstract: Introduction: Cardiomyopathy is a rare condition in the young but has been reported in the context of COVID-19 as well as following COVID-19 vaccination. Should cardiomyopathy be accepted as a rare adverse reaction to the COVID-19 vaccine?

Case Presentation: A 29-year-old Active Duty male with no pertinent medical history presented for acute right arm weakness and facial asymmetry. MRI brain revealed findings consistent with hyperacute ischemic stroke in the left primary motor cortex. His neurologic deficits quickly resolved after tPA.

A transthoracic echocardiogram revealed a dilated cardiomyopathy with an ejection fraction of 20-25% without evidence of an LV thrombus or a PFO. CT pulmonary angiography was notable for segmental PE. Heparin was initiated.

On hospital day three, a CODE STROKE was called for recurrent neurologic deficits with complete right-sided weakness and aphasia. Non-contrast CT head was negative for hemorrhagic conversion and CT angiography revealed a distal left MCA thrombus not amenable to endovascular intervention. Cardiac MRI revealed mid-myocardial late gadolinium enhancement suspicious for myocarditis. Further history revealed that the patient had contracted COVID-19 in January 2021 and received the Pfizer mRNA vaccine in April/May 2021. Several weeks prior to presentation, he recalls symptoms of new-onset heart failure.

Cardiac catheterization ruled out obstructive coronary artery disease. Transesophageal echocardiography revealed no intra-cardiac thrombus. Inpatient telemetry was negative for atrial fibrillation. Work-up was negative for rheumatologic disease and hypercoaguable state. The patient was bridged to coumadin for presumed cardioembolic stroke. He awaits endomyocardial biopsy to confirm diagnosis of viral myocarditis.

Discussion: We suspect the patient developed COVID-19 myocarditis that resulted in a severe dilated cardiomyopathy and cardioembolic stroke secondary to LV thrombus. As symptoms occurred shortly after COVID-19 vaccination, a vaccine-induced myocarditis is also plausible.

Given recent reports of vaccine-induced cardiomyopathy in young adults, this case highlights a potential vaccine-related adverse event.

Presentation Number: 2.10

Category: Clinical Vignettes

Title: E-cigarette or Vaping, Product Use Associated Lung Injury in the COVID-19 Pandemic

First Author: Maria Leon-Camarena

Additional Authors: Julie Machen, MD

Institution: Dell Medical School | The University of Texas at Austin

Abstract:

Case Presentation: 21 year old previously healthy male presented with cough, dyspnea, chest pain, fevers and vomiting. He was normotensive, afebrile and required 2L of oxygen on presentation. Initial laboratories showed leukocytosis, thrombocytosis and elevated inflammatory markers. Chest x-ray showed bilateral pulmonary infiltrates. Patient denied tobacco and drug use, including vaping. He was admitted as a person under investigation for COVID. He was initially COVID negative and other infectious workup was also negative. Due to continued high suspicion for COVID, he was tested twice more, results were negative. His oxygen requirements increased to 13L, CT angiogram was negative for a pulmonary embolism and showed severe bilateral airspace disease. The patient became more trusting and admitted to vaping daily for the past 3 months. Pulmonology started methylprednisolone for EVALI and he clinically improved and was discharged with a steroid taper. He was advised to never use e-cigarettes or vaping products - he was doing well at his two week follow up.

Discussion: EVALI is a pulmonary disease caused by e-cigarettes/vaping products. As of February 2020, there were 2807 cases of patients hospitalized with EVALI, with 68 resulting in death. EVALI is diagnosed by constellations of systemic, respiratory and gastrointestinal symptoms, with a history of vaping within 90 days, imaging shows ground glass opacities and infectious & autoimmune workup is negative. These findings overlap with the presentation of COVID-19 infection and complicates the diagnosis of EVALI.

Conclusion: EVALI is a preventable disease. Due to the significant overlap of symptoms and image findings, there is difficulty diagnosing EVALI from COVID-19. There is no pathognomonic that can distinguish the two, thus a social history is essential. Providers should revisit sensitive questions after building a trusting relationship with patients. The re-appraisal of clinical reasoning can help clinicians overcome anchoring bias and improve patient care.

References:

Presentation Number: 2.11

Category: Clinical Vignettes

Title: CCC: CHF vs Cirrhosis vs Cancer

First Author: Nimmy Thomas

Additional Authors: Nitya Rao, MD; Matt Hubley, DO; Shreya Ahuja; Holly Langley; Senthil Sivam, MD

Institution: Dell Medical School | The University of Texas at Austin

Abstract:

A 67yo male with no past medical history was sent to the ED by their PCP for evaluation of microcytic anemia with a Hgb of 7.5 and elevated creatinine level of 2. On exam, patient was noted to have a distended abdomen and 2+ pitting edema in bilateral lower extremities. TTE identified EF of 70-75% with no regional wall motion abnormalities and an elevated PASP of 74mmHg making cardiac etiology less likely. US abdomen identified moderate volume ascites with no focal lesions in the liver or kidneys. Bedside paracentesis was performed which removed 4.5L of peritoneal fluid. Analysis of the fluid found a SAAG of 0.5 indicating that the ascites was not due to portal hypertension making liver etiology less likely. A CT A/P was collected which identified a large osteolytic lesion in the right sacral wing with possible para-aortic and bilateral common iliac lymphadenopathy. MRI pelvis confirmed the large aggressive enhancing lesion centered in the right hemisacrum and patient was scheduled for a bone biopsy. Peritoneal fluid cytology identified no malignant cells, but bone biopsy results indicated that it was a plasma cell neoplasm. SPEP and UPEP results confirmed the diagnosis with monoclonal proteins in the gamma fraction.

The diagnostic criterion for multiple myeloma requires 10% or more clonal plasma cells on bone marrow examination or a biopsy-proven plasmacytoma with one or more myeloma defining events (hypercalcemia, renal insufficiency, anemia, bone lesions). This patient met the criteria and was referred to oncology for treatment. This case illustrates the value of a systematic approach to assessing patients with limited medical history to narrow down the diagnosis. Epidemiologically, evaluation for the three most common causes of volume overload in patients in the United States: CHF, cirrhosis, and cancer enabled the patient to have focused assessments and receive a final diagnosis.

References:

Presentation Number 2.12

Category: Clinical Vignettes

Title: Maintaining Diagnostic Curiosity in the Setting of Immunocompromising Medications

First Author: Brooke Wagen

Additional Authors: Paul Sarkaria, DO

Institution: Dell Medical School | The University of Texas at Austin

Abstract: A 46 year old woman presented to the emergency department of our hospital for evaluation of progressive abdominal and lower back pain. She had nausea and vomiting, subjective fever and chills, 20 pound weight loss over the past month, and skin ulcers in her inguinal crease which had appeared two days prior. Notable medical history included psoriatic arthritis, for which she received weekly etanercept injections; other medications were naproxen and amoxicillin-clavulanate.

On admission, the patient had a mildly elevated white count. Vitals were stable. CT of the chest, abdomen, and pelvis was performed which demonstrated periportal/mesenteric/retroperitoneal lymphadenopathy (new since imaging 2 weeks prior), splenic lesions, nonocclusive splenic vein thrombosis, and left-sided pleural effusion. Endoscopic FNA of a periportal lymph node found fibrosis and necrosis. Punch biopsy of groin ulcer found neutrophilic dermatitis. Surgical oncology performed a diagnostic laparoscopy; radiologic lymph nodes were intra-abdominal abscesses which expelled frank pus on sampling. Pathology and cultures were negative for malignancy or organisms. High dose intravenous steroids were initiated with rapid improvement of her clinical symptoms and skin ulcerations. Final diagnosis was aseptic abscess syndrome and pyoderma gangrenosum. She was discharged home with oral steroids and close rheumatology follow-up.

This case is a good reminder for clinicians to maintain an elevated level of diagnostic curiosity in the context of immunocompromising medications. The constellation of presenting symptoms almost resulted in discharge from the ED, but ultimately led to a broad differential including bacterial/mycobacterial, viral, and fungal infection, malignancy, and immune/inflammatory syndromes. Her hospitalization was characterized by progressive escalation of tissue diagnosis starting with punch skin biopsies to endoscopic FNA to surgical exploration of her abdomen. Given her hemodynamic stability and lack of shock/sepsis presentation, no empiric antibiotic therapy was given which maximized the efficacy of diagnostic culture evaluation.

References: