

immunosuppression, adrenal suppression, and significant hyperglycemia, all of which can result in emergency department (ED) visits and potentially hospitalization. We evaluated whether increased cumulative dose of intra-articular/bursa corticosteroid was associated with an increased number of ED visits/hospitalizations.

Methods: Our group has followed a large cohort of 8816 local patients receiving joint/bursa corticosteroid injections from May 2018 to July 2022. An institutional database was used to collect all clinical data. Retrospective injection data was collected for the years 2018-April 2021, and prospective data was collected from May 2021 onward. Based on the cumulative dose received, the injection group was divided into “High”(> 600 mg) , “Medium”(160-599 mg), and “Low”(<160 mg) dose. Descriptive statistics and linear regression were used to analyze data.

Results: The High dose group was older (median age 72 y) than the Medium (median age 70 y) and Low dose (median age 66 y) groups, $P < 0.01$. A larger percent of High dose patients were female (75%) than Medium (67%) or Low dose (59%). Patients in the High dose group received an average of 847 mg (range 2140 mg-600 mg) methylprednisolone equivalents, the Medium group 276 mg (range 599 mg-160 mg) and the Low group 70 mg (range 159-2.7 mg). The total number of ED visits/hospitalizations was 19,124 over the 4-year study period. ED visits accounted for 12,777 of these, and the most common complaint was chest pain (n=1310) followed by abdominal sympto

ESR, CRP, and IL-6 levels were high. This together with a constellation of clinical findings and imaging, a diagnosis of multicentric HHV-8 negative Castleman's disease was made and Siltuximab every three weeks was initiated. His symptoms resolved after the first cycle of Siltuximab but recurred after the second cycle when the course of prednisone was completed. The PET scan after 2 cycles showed a mixed response with increased uptake in supraclavicular lymph nodes and decreased uptake in the chest lymph nodes. There was a slight increase in left pleural and pericardial effusions. Inflammatory markers remained stable with slight improvement. He underwent thoracentesis of exudative effusion with no evidence of lymphoma. He also underwent pericardiocentesis of inflammatory effusion. These interventions led to significant improvement in his symptoms, and the treatment was changed to weekly Siltuximab to which he was responding well. However, four weeks later, his symptoms progressed again with chest pain, and shortness of breath and he noticed a new suddenly enlarged right supraclavicular lymph node. Repeat pericardiocentesis for recurrent pericardial effusion showed negative cytology. The biopsy of the new lymph node biopsy revealed large cell lymphoma with extensive necrosis with the expression of PAX-5, CD15, CD30, MUM-1, and negative for CD20, CD19, CD79a, and CD45 favoring the diagnosis of gray zone lymphoma.

Conclusion: We presented the case of an idiopathic MCD who developed gray zone lymphoma despite treatment. We conclude that a rebiopsy should be performed when in doubt about the diagnosis.

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Dermatomyositis as the Initial Manifestation of Lung Cancer

Introduction:

small cell carcinoma. Oncology evaluated the patient and initiated chemotherapy.

Discussion: This case highlights both typical and atypical features of dermatomyositis, as well as the importance of screening for cancer in patients with dermatomyositis. While proximal muscle weakness with characteristic rash are typical manifestations of dermatomyositis, dysphagia has also been reported in 18-20% of patients with dermatomyositis. Subcutaneous edema is a rarer manifestation; as of 2019, there were <30 cases of paraneoplastic edematous dermatomyositis reported in literature. As illuminated in our case, approximately 20-30% of patients with dermatomyositis develop malignancy within 5 years of symptom onset. Clinicians should have a high index of suspicion for malignancy in patients with dermatomyositis, and age-appropriate cancer screening is recommended.

activity. Although relatively rare, internis

Introduction: Acute Promyelocytic Leukemia (APL) is a subtype of acute

Case Presentation: Here we present the case of a 77-year-old man with a pertinent medical history including atrial fibrillation, ischemic congestive heart failure, history of coronary artery bypass grafting, previous deep vein thrombosis (DVT), type II diabetes mellitus, stage III chronic kidney disease, gastroesophageal reflux disease and microcytic anemia presenting with generalized weakness and dizziness in the setting of a 3-month worsening history of dysphagia and dizziness. The patient had been undergoing outpatient workup for dysphagia progressing to inability to swallow fluids or solids at the time of admission. He also reported a 35-pound weight loss over 3 months. Endoscopy two months prior revealed erythematous esophagus and abnormal mucosa but no obvious signs of malignancy. Repeat endoscopy 4 days prior to admission was aborted due to a large amount of food in the stomach despite the very limited intake of the patient.

CT angiogram of the chest abdomen and pelvis on admission revealed several bilateral segmental and subsegmental pulmonary emboli as well as marked thickening of the gastroesophageal junction with enlarged lymph nodes in the gastric hepatic ligament concerning for distal esophageal neoplasm. Multiple new hypoenhancing masses throughout both hepatic lobes had developed since previous imaging were concerning for metastases. A masslike area near the hilum of the liver with intrahepatic biliary ductal dilatation was noted, possibly representing an obstructing metastasis.

	<p>The patient was a 39-year-old woman who presented with an arm nodule that was removed showing a CIC-DUX sarcoma. The CIC-DUX fusion results in a transcription factor with oncogenic properties, although the relevant downstream signaling pathways are unknown. CIC-DUX4 sarcomas have been shown to have a wide spectrum of morphology with generally a more aggressive course and inferior overall survival as compared to Ewing sarcoma. There are no therapies targeting CIC-DUX4 rearrangements available at present. The patient relapsed 2 years after standard chemotherapy, and following a transient response to pegylated-liposomal doxorubicin, the decision was made to explore an experimental therapy. NGS in our patient revealed a mutation in patched homolog 1 (PTCH1). PTCH1 is part of the sonic hedgehog (Shh) signaling pathway; mutations in this pathway have not been reported in Ewing family tumors and have traditionally been implicated in cancers such as nevoid basal cell carcinoma syndrome, or Gorlin-Gotz syndrome. Vismodegib is a small molecule inhibitor of smoothened (SMO), a key part of the Shh pathway. Vismodegib inhibits Shh signaling and is approved by the FDA for treatment of locally advanced and metastatic basal cell cancer (BCC). BCCs commonly have PTCH1 mutations and those with PTCH1 mutations are often responsive to Shh inhibition via vismodegib. We therefore treated this patient with vismodegib at 150 mg/d orally. After one month, imaging showed tumor progression.</p> <p>Conclusion: This case demonstrates that identification of a mutation that is a target for a specific therapy does not guarantee that the tumor will respond to the targeted therapy. The utility of targeting a potential mutation likely depends upon the background biochemistry of the malignant cell and the degree to which cell survival depends on the targeted protein. In our case, it appears that the CIC-DUX4 rearrangement resulted in sarcoma cell growth that was not dependent on Shh signaling.</p>
<p>Agnes Zhu Dr. Cecilia Mitchell Dr. Jonathan Lang Dr. Alexander Theofiles</p>	<p><i>Disseminated Gonococcal Infection: A Case of Septic Polyarthritits without Dermatitis</i></p> <p>Introduction: Neisseria gonorrhoeae infection is the second most common sexually transmitted bacterial infection worldwide, with over 600,000 cases reported annually in the United States. Between 0.5 and 3% of patients with gonorrhea develop disseminated gonococcal infection. Patients may present with localized purulent arthritis or “arthritis-dermatitis syndrome,” which comprises tenosynovitis, dermatitis and polyarthralgia. Therapy typically consists of intravenous ceftriaxone. Patients should be tested for Chlamydia trachomatis co-infection.</p> <p>Case Description: A 57-year-old man with type 2 diabetes mellitus and hypothyroidism was admitted to the hospital with a 5-day history of swelling, redness, and pain in his right elbow, bilateral ankles, and upper neck. He endorsed several days of dark brown urine, but otherwise denied hematuria, penile discharge, other genitourinary symptoms, or rash. He had no recent tick or mosquito bites and no personal or family history of crystalline arthropathy or autoimmune disease. He denied headache or changes in mental status. Sexual history did not reveal risk factors for sexually transmitted infection.</p> <p>At presentation, he was afebrile and tachycardic. Laboratory studies were notable for WBC $23 \times 10^9/L$, sodium 126 mmol/L, creatinine 2.20 mg/dL, sedimentation rate 118 mm/h, and c-reactive protein >400 mg/L. Ankle x-ray was negative for fractures or dislocations. On physical exam, right elbow and</p>

bilateral ankles were warm, swollen, erythematous, and had decreased passive range of motion. There was paraspinal tenderness in the upper cervical spine.

A cervical spine MRI showed findings suspicious for early inflammatory versus septic arthritis involving the atlantoaxial and atlantooccipital joints. Rheumatologic workup revealed mildly positive rheumatoid factor and negative ANA, CCP, ANCAs. Infectious workup revealed negative blood testing for Lyme, HIV, Hep

laboratory exams and Hepatocellular Carcinoma screening.

Conclusion: Telomere Biology Disorders are a group of diseases related to germline mutations that affect telomere maintenance. The telomere length can be evaluated in peripheral blood leukocytes with results below the age-adjusted 10th percentile considered suggestive of TBD.

Genetically inherited telomere disorders have been associated with the occurrence of cryptogenic cirrhosis, likely secondary to reduced regenerative capacity of hepatocytes. It was also demonstrated that TBD may accelerate the development of advanced fibrosis in patients with liver diseases of different etiologies. Recent publications, correlating cell senescence and Nonalcoholic Fatty Liver Disease, reported a higher incidence of telomere shortening in hepatocytes of patients with hepatic steatosis, when compared with controls.

TBD must be considered in young patients who develop hepatic fibrosis, especially if when risk factors for chronic liver disease are absent or there is

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cancer-related death in the United States. While rates of CRC screening in the internal medicine resident continuity clinic at Mayo Clinic Rochester are 75%, CRC screening rates are only 46% for the Somali-speaking population in this clinic. Our project focused on understanding the barriers to successful multitarget stool DNA testing (Cologuard®) completion in the Somali-speaking population in our primary care clinic.

Methods: An audit of CRC-eligible Somali-speaking patients attending the resident continuity clinic between July-September 2022 was conducted. While eight patients had a Cologuard® ordered, only one patient subsequently completed screening. A survey with open-ended, standardized questions was utilized to identify barriers patients faced when attempting to complete the Cologuard® kit and to evaluate the potential efficacy of interventions aimed at minimizing these barriers.

Results: Five out of eight (63%) surveys were completed via phone call. Various barriers were identified including: confusion regarding how to complete and submit a test, with patients relying on English-speaking family members who were not always available to assist with Cologuard® instructions, and a lack of patient awareness when an inadequate sample was submitted, which occurred in 2 of 8 cases. It was also noted during the course of the study that in cases where the sample was found to be inadequate, the ordering physician was not directly notified. Three out of the five patients who completed the survey indicated that in-person nursing education visits with a Cologuard® demonstration kit, video instructions in Somali, and written instructions in Somali would all be helpful in completing the screening.

Conclusion: This data elucidated several barriers to the successful completion of CRC screening with Cologuard® in the Somali-speaking population. Additionally, this study highlights the lack of Somali instructions and resources available to aid in completing this kit. Limitations to this project include small sample size and a low success rate in reaching patients. In the future, this study will continue to grow in sample size and will include data regarding the impact of interventions identified as potentially efficacious in this study. These findings may help providers understand how to help extend equitable care to Somali communities and other minority populations with significant language barriers.

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which could include testing, referrals, counseling, or tracking. Category “S” is the Lung-RADS code applied when a SIF is present. Primary outcome was follow-up, defined as any assessment or intervention ordered and/or completed in relation to the finding or documented as unnecessary. High-risk SIFs were defined as potentially malignant. Outcomes were analyzed using a mixed effects model with individual patient as a random effect.

Results: Patients (n=901) were primarily male (94.1%) current smokers (62.1%) with a mean age of 65.2 years. IFs were extremely common (93.9%) with an average of 2.6 IFs per scan (n=2296). Pulmonary findings (48.6%) were most common, followed by atherosclerosis (25%). 786 IFs (34.2%) were deemed likely significant. 58/786 (7.4%) were high-risk and 222/786 (28.2%) had workups ordered, completed, or documented to be unnecessary, of which 104/786 (13.2%) completed additional testing or evaluation. A minority of SIFs (293/786, 37.2%) had “S” applied to the LDCT. Reporting of IFs varied greatly by Radiologists (see Table). Despite not applying “S” category, radiologists frequently recommended testing, including for benign findings (e.g. simple cysts). Presence of a radiologist recommendation (OR 3.3, 95% CI 1.9-5.7), high-risk finding (OR 2.9, 95% CI 1.5-5.6), and reporting in the impression (OR 2.1 95% CI 1.2-3.8) were associated with increased odds of workup or documentation, while “S” code, number of IFs, presence of a suspicious pulmonary nodule, reading radiologist, and patient age were not associated with odds of workup or documentation.

Conclusions: IFs are extremely common on LDCT and may be clinically significant but are not reported systematically. Reporting characteristics have a large impact on subsequent evaluation. Guidance and training to support structured reporting of SIFs may improve this process, with the goal of generating appropriate testing when needed and preventing low-value care.

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	<p>no TB compared to age/sex-matched (3:1) patients with a positive COVID PCR and new or previous diagnosis of TB.</p> <p>Results: A total 93 and 31 COVID-19 patients were included in the non-TB and TB matched cohorts. For TB patients, 32% of patients had active infection vs. 65% with latent infection. Most TB was pulmonary (55%), and most patients with TB had a history of past treatment (68%). For patients with TB vs. those without, hospitalization was required in 45% vs. 36% (p=0.34), ICU care in 16% vs. 8% (p=0.16), and mechanical ventilation in 13% vs. 3% (p=0.06), respectively. However, length-of-stay (5.0 vs. 6.1 days, p=0.97), in-hospital mortality (3.2% vs. 3.2%, p=1.00), and 30-day mortality (6.5% vs 4.3%, p=0.63) did not differ significantly between TB and non-TB groups.</p> <p>Conclusion: Despite patients with COVID-19 and TB being hospitalized, receiving ICU care, and requiring mechanical ventilation at higher rates, this did not correlate with higher mortality nor increased LOS. This finding is counter to the clinical presumption that TB infers worse outcomes in patients with COVID-19 and may help inform treatment and resource-limited discussions for this patient population.</p>
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<p>Hussein Magale Derek Kamal Nellie Adams Dr. Jessica Park Dr. Elie Gertner Dr. Michael Schnaus</p>	<p><i>A Retrospective Review: CT Pulmonary Angiogram Use in COVID-19</i></p> <p>Pulmonary Embolism (PE) is recognized as a major thrombotic finding in COVID-19 patients. Diagnosing PE in the setting of COVID-19 infection can be challenging as the symptoms often overlap and no risk stratification tools has been validated in patients with COVID-19. While CT Pulmonary Angiogram (CTPA) remains the gold standard imaging test to diagnose PE, internal evaluation cautions CTPA overuse at our facilities to rule out PE in COVID-19 patients. Our single-center retrospective study aims to evaluate clinical predictors of PE in patients admitted with COVID-19 to guide clinicians on when and which patients to obtain CTPA. Of the 75 charts reviewed so far, we found that 9.3% of COVID-19 patients with CTPA were positive for PE which is consistent with prior estimates in the literature. We also noticed a statistically significant trend toward higher D-Dimer levels in CTPA-positive patients and more charts need to be abstracted for higher confidence. With ongoing final data abstraction and analysis, our findings will guide clinicians with clinical criteria to limit the overuse of CTPA as a screening test in COVID-19 patients.</p>
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Activities of Daily Living (ADL) Scale 224 98.688 202.61 reW*2BT/F1 11.04 Tf1 0 0 1 203.

reported difficulty with activities of daily living at diagnosis. Of those, 257 (45%) had moderate difficulty and 148 (26%) had severe difficulty. Independent predictors of difficulty included female sex (OR 1.72, 95% CI 1.27-2.38, $p=0.001$), older age (OR per 10-year increase 1.17, 95% CI 1.05-1.31, $p=0.005$), dementia (OR 1.85, 1.06-3.24, $p=0.031$), depression (OR 1.75, 1.28-2.40, $p=0.001$), and morbid obesity (OR 1.49, 1.04-2.13, $p=0.031$). Estimated 2-year mortality was 61.5%, 64.2%, and 67.6% in patients with no/minimal, moderate, and severe difficulty. The adjusted HR (95% CI) for death were 1.08 (0.90-1.28) and 1.17 (0.95-1.43) for moderate and severe difficulty versus no/minimal difficulty ($p=0.33$). There were no statistically significant associations of difficulty with activities of daily living and hospitalization risks.

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Sleep Duration and Cognitive Dysfunction Among Older Adults with Chronic Kidney Disease

Background: Short and long sleep durations are associated with cognitive dysfunction. Given the increased prevalence of sleep abnormalities in the CKD population, we tested whether the association between sleep duration and cognitive function differed between older adults with and without CKD.

Methods: This was a study of 3,215 older adults (aged 60years) enrolled in the National Health and Nutrition Examination Survey (2011-2014) evaluating sleep duration, cognitive function (immediate recall, delayed recall, verbal fluency, executive function and processing speed, and global cognition), and kidney function. We quantified the association between sleep duration and cognitive function using linear regression and tested whether the associations differed among those with CKD and without using a Wald test for interaction.

Results: Among 3,215 participants, 13.3% reported 2-5 hours of sleep per day, 75.2% reported 6-8 hours, and 11.5% reported 9 hours. Persons with CKD were more likely to sleep 9 hours (OR=1.73, 95% CI: 1.22-2.46). Among participants with CKD, those with sleep duration 9 hours demonstrated worse global cognitive function (p for interaction=0.01), immediate recall (p for interaction=0.01), and verbal fluency (p for interaction=0.004) than those with 6-8 hours sleep duration; no differences were observed for participants with CKD who slept 2-5 hours. Among participants without CKD, sleep was not associated with any measures of cognitive function.

Conclusions: Longer sleep duration is associated with worse cognitive function only among persons with CKD and global cognition, delayed recall, and verbal fluency are particularly affected. Studies should identify interventions to improve sleep patterns and quality in this population.

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KEY LEARNING POINTS

What is already known about this subject?

- Sleep duration is an extensively studied component of sleep quality and has been found to have a U-shaped association with cognitive decline. Given that shorter and longer sleep durations are associated with cognitive dysfunction, we sought to explore whether this association differs among persons with CKD.

What does this study add?

- Long sleep duration is more common among persons with CKD. There were no significant associations between cognitive function and sleep duration among those without CKD. Among participants with CKD, those with long sleep duration demonstrated worse global cognitive function, immediate recall, and verbal fluency compared to those with shorter sleep duration.

What impact may this study have on practice or policy?

- Sleep duration may be a salient factor in the relationship between kidney function and cognitive decline. Primary care physicians and nephrologists should consider counseling patients with CKD about excessive sleep, and further studies should identify any underlying sleep disturbances in this patient population that may mediate cognitive decline.

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drug use. He is sexually active with one female partner. Few days earlier, he was seen in a local clinic and was given ceftriaxone and cephalexin course for possible right arm cellulitis and UTI. His symptoms progressed, so he presented to the ED for further evaluation.

He had tachycardia with temperature of 39.9°C. Physical examination revealed erythema, swelling, and tenderness over the right upper arm with similar changes over the right anterior thigh and left posterior calf. Cardiac auscultation showed grade 3/6 systolic murmur. The rest of the physical exam was unremarkable.

Labs showed leukocytosis, with high ESR, CRP, and CK. Urinalysis was positive for leukocyte esterase and WBC. Right upper extremity ultrasound showed signs suggestive of cellulitis and intramuscular micro-abscesses. Blood cultures were obtained, and he was admitted to the hospital. HIV was negative, with normal immunoglobulin levels. Further imaging showed abscesses in all three affected extremities and in the prostate. Transthoracic echo (TTE) was negative for vegetations. Ultrasound guided aspiration of his abscesses revealed pus that grew methicillin resistant staphylococcus aureus (MRSA). Blood and urine cultures continued to be negative, even after 5 days of incubation. Trans-esophageal echo (TEE) showed 4x2 mm soft echo density on the mitral valve with multiple strands and mild-moderate mitral regurgitation. The patient was treated with IV vancomycin and improved significantly.

Conclusion: Positive blood cultures is one of the major Duke criteria for IE diagnosis; however, its absence does not rule out the diagnosis. Our patient is young with no risk factors suggesting IE. His negative TTE and blood cultures only after cephalosporin administration further decreased the possibility of IE, especially after isolating MRSA from his abscesses. On the other hand, the multi-focal abscesses and heart auscultation were pointing towards one organ- the heart. In such cases, clinicians should have a low threshold in pursuing the more specific imaging modality, TEE, even in the

Discussion: This case demonstrates the importance of keeping a broad differential for back and neck pain, especially in a patient who has a persistent infection. The pain was thought to be musculoskeletal, especially in a patient who is obese and minimally mobile with a known history of osteoarthritis. She continued to require multiple doses of IV and oral opioids to manage her pain which could have prompted earlier imaging since this is atypical of osteoarthritis.

Unfortunately, the classic triad for epidural abscess only presents in as few as 8% of patients. This patient was immunocompromised (ESRD on dialysis) so she would be less likely to mount a fever. The patient was generally weak and minimally able to give full effort for neuro exam, however neurologic signs due to direct compression from the abscess and are often a late finding. Clinicians should be vigilant in imaging for epidural abscess even without the full triad of symptoms. CTs even with contrast have lower sensitivity than MRI for epidural abscess, the test of choice. In this patient with persistently positive blood cultures and leukocytosis, MRI spine could have been considered earlier, and epidural abscess should not be ruled out with a negative CT.

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management of Lyme disease to prevent cardiac complications such as acute AV nodal disorders which can rapidly evolve to a high degree AV block and lead to cardiac morbidity and mortality. Having a higher clinical suspicion for Lyme carditis, especially in patients with a travel history to endemic areas who present with bradycardia or AV block with or without cardiac symptoms is imperative. Early recognition allows for timely management which includes IV antibiotics and, in some cases, temporary cardiac pacing to prevent possible negative outcomes.

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An Uncommon Connection: Retroperitoneal Pancreatic Pseudocyst with Fistulization to the Portal and Superior Mesenteric Veins

Introduction: Chronic alcohol use disorder is linked to pancreatitis and pseudocyst formation. Here we present an adult man with chronic pancreatitis, weight loss, and concerning features on abdominal imaging with an alternate, rare explanation for these findings.

Case Description: A 50 year old man presented to the Emergency Department for failure to thrive and weight loss in the setting of alcohol use disorder, general anxiety disorder, and major depressive disorder. The patient also had complaints of epigastric discomfort, fatigue, and decreased appetite. Physical examination was notable for cachexia and mild abdominal tenderness.

	<p>minutes by Mayo treadmill protocol, 4.8 METS (79% predicted), peak heart rate of 84 BPM (58% predicted), and peak systolic BP 134 mmHg. This was consistent with chronotropic incompetence with blunted blood pressure response and limited exercise capacity. There was suspicion timolol was causative. He underwent laser trabeculoplasty with Ophthalmology and was weaned off timolol. On follow-up, repeat exercise stress testing showed 6.5 minutes by Mayo treadmill protocol peak heart rate 107 BPM (16% improvement). He noted complete resolution of cardiopulmonary symptoms following discontinuation of timolol. Follow-up one year later showed continued resolution of dyspnea.</p> <p>Discussion: In general, topical medications are often overlooked when evaluating for drug-induced systemic side-effects. As seen here ophthalmic timolol was the culprit drug. Interestingly, timolol drops notably avoid first pass hepatic metabolism through absorption via the lacrimal ducts into the venous circulation, which leads to increased systemic drug levels. This nuanced concept illustrates the importance of understanding the pharmacokinetics and side-effect profiles of medications. Furthermore, this case highlights the importance of a judicious approach in evaluation of a patient's pharmacologic history. In this case, appropriate recognition of drug side effects led to discontinuation of the offending medication and avoided unnecessary permanent pacemaker placement.</p> <p>.</p>
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<p>Matteo Castrichini Dr. Matthew Samek Sarah Schrup Dr. Floranne Ernste</p>	<p><i>Nonbacterial Thrombotic Endocarditis in anti TNF-alpha Induced Lupus with Antiphospholipid Antibody Syndrome. A Case Report</i></p> <p>Background: drug induced lupus (DIL) encompasses a broad spectrum of manifestations, most frequently of the skin, but also systemic complex conditions, especially when induced antiphospholipid antibody syndrome is also present. A stepwise diagnostic strategy with a correct medical history and a thoughtful imaging evaluation is the cornerstone for the appropriate approach.</p> <p>Case Presentation: we report the case of a 45-year-old woman with past medical history notable for rheumatoid arthritis in infliximab, presenting at the emergency department for thalamic stroke with the evidence of a patent foramen ovale (PFO) at the transthoracic echo. At the transesophageal echocardiogram the absence of shunt at the PFO, and the evidence of mobile small vegetations of the aortic valve. The presence of positive antiphospholipid antibodies, a new skin rash together with the imaging findings, suggested a new diagnosis of DIL most likely due to infliximab, with antiphospholipid antibodies syndrome and nonbacterial thrombotic endocarditis, emphasizing the critical role of imaging and medical history in the differential diagnosis of source of embolism.</p> <p>Discussion: in the complex field of source of embolism a proper differential diagnosis is extremely important in order to start the appropriate treatment, however sometimes it could be extremely challenging especially in the contest of an underlying autoimmune disorders.</p>
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	<p>ischemia following transient occlusion of a retinal artery by micro emboli, usually from an atherosclerotic plaque in the carotid artery. It is considered a transient ischemic attack.</p> <p>Case Presentation: A 69-year-old male with a mechanical aortic valve on warfarin, dyslipidaemia, and poorly controlled hypertension presented to the emergency department for two successive episodes of abrupt complete but reversible vision loss in his left eye. His vision loss was also associated with sensation of flashing lights in the same eye. Physical examination was remarkable for decreased acuity in his left eye, but no other deficits were seen. A presumable diagnosis of amaurosis fugax was made and the patient was admitted to the hospital for further workup to determine the origin of the amaurosis fugax. Brain MRI was negative for acute ischemia; however chronic small ischemic changes of the cerebral white matter were seen. There was no evidence of optic nerve inflammation or damage. CT angiography of the neck showed patent carotid arteries bilaterally with less than 10% obstruction in each artery. Head CT angiogram demonstrated no intracranial aneurysms or significant stenosis of the major intracranial arteries. Cardiac ultrasound was negative for ventricular thrombus and showed good functioning of the prosthetic valve without any marked valvular abnormalities. Ophthalmology was consulted, fundus imaging showed evidence of Hollenhorst plaque at a nasal bifurcation of the retinal artery with cotton wool spots on the retina suggestive of ischemia. The patient was started on high intensity statin therapy as well as aspirin and was recommended to follow up with his primary care physician for adequate blood pressure control, and with neurology and ophthalmology after discharge.</p> <p>Conclusion: Amaurosis Fugax is a type of transient ischemic attack that is equivocal to ischemic stroke. Although atherosclerotic disease of the carotid arteries is the most common aetiology, some patients have no clear source of embolism. A comprehensive and multidisciplinary approach is required for adequate diagnosis and prognostication. Even in the absence of a specific aetiology, amaurosis fugax should be treated with high urgency to prevent occurrence of permanent vision loss.</p>
<p>Deandra Chetram Dr. Kyla Lara-Breitinger Dr. Courtney Bennett</p>	<p><i>Too Young to Have a Myocardial Infarction? Check a Lipoprotein (a) Level</i></p> <p>Background: Lipoprotein(a) [Lp(a)] is a low-density lipoprotein (LDL) particle that includes apolipoprotein (a) attached to apolipoprotein B-100. Lp(a) is pro-atherogenic, pro-thrombotic, pro-inflammatory and an independent risk factor for coronary artery disease (CAD), ischemic stroke, and aortic valve stenosis. Lp(a) is present in approximately 20% of the population and is genetic.</p> <p>Case Presentation: A 42-year-old male with no cardiovascular risk factors presented to an Emergency Department due to crushing chest pain with exertion. Associated symptoms included diaphoresis, dyspnea, palpitations, and arm paresthesia. The week prior, he experienced similar chest pain when walking longer distances. He had a less than 2 pack year smoking history, smoked cigars occasionally, consumed alcohol socially and denied illicit drug use. His family history was notable for a brother with a possible myocardial infarction (MI) at the age of 42.</p> <p>His workup included an electrocardiogram that demonstrated an anterolateral ST-segment elevation (STEMI) in leads I, aVL, V2, and V3 and an initial</p>

troponin of 19. He was loaded with aspirin and clopidogrel, and was initiated on a heparin drip while being transferred to a percutaneous coronary intervention-capable facility. Emergent coronary angiogram was significant for 99% occlusion with intracoronary thrombus of the proximal left anterior descending artery for which he received a drug eluting stent. Multivessel disease was also present ranging from 10%-80% stenosis.

erythema. Patient's labs were significant for WBC 13.04, CRP 104, and procalcitonin 0.11. Wound cultures grew *Pasteurella*, *Pseudomonas*, and *Enterococcus*. He was started on ceftriaxone without significant improvement. Infectious disease recommended considering alternative diagnoses to cellulitis. Dermatology was consulted for repeat biopsy and suspected an underlying vasculitis or calciphylaxis. An autoimmune and hypercoagulable work-up was conducted with unremarkable hepatitis B, hepatitis C, rheumatoid factor, cryoglobulins, SPEP, ANCA, prothrombin, protein C and S, antithrombin III, and lupus anticoagulant. Parathyroid hormone was slightly elevated and calcium was normal. Biopsy results were indicative of calciphylaxis. A malignancy work-up was initiated with CT of the chest, abdomen, and pelvis that demonstrated indeterminate renal lesions. Patient was administered one dose of sodium thiosulfate and was recommended to follow-up with dermatology and obtain additional imaging of renal lesions.

Conclusion: This case demonstrates the importance of biopsy in non-healing wound. The diagnosis of calciphylaxis had significant therapeutic ramifications including avoiding hypercalcemia and hyperphosphatemia, normalizing parathyroid hormone, avoiding high risk medications such as warfarin, and trialing sodium thiosulfate.⁵ The diagnosis was also important for prognostication. Patient should be consulted on infection risk since calciphylaxis has an estimated mortality rate of 52-80% largely secondary to sepsis.²

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A C

Presenting as Cavernous Sinus Thrombosis

Introduction: A 75-year-old male presents with weakness and malaise after being recently diagnosed with a cavernous sinus thrombosis.

Case presentation: A 75-year-old male presented to the emergency room with worsening generalized weakness, headache, and nausea. He had been diagnosed 2 weeks prior with a cavernous sinus thrombosis and was undergoing treatment with apixaban. On presentation, he was found to have right ptosis in addition to right cranial nerve 3 and 6 palsy. He was also noted to have an ulcerated mass on the inside of his mouth along the left lower gumline that was new on exam. Admission labs were notable for a 4 g hemoglobin drop over the span of 1 week. Admission CT head venogram showed redemonstration of the cavernous sinus thrombosis.

Patient was started on a heparin drip and underwent an esophagogastroduodenoscopy to investigate his anemia in the context of recent anticoagulation initiation. His EGD showed several oozing ulcers that were biopsied. He also underwent a mandibular biopsy to investigate his new ulcerated mandibular mass. While waiting on the pathology reports, the patient started developing new cranial nerve impairment and ptnBT/F1 11.04 T

his PET-CT showed treatment response and his CSF was negative for malignancy. He was then discharged with the plan to undergo outpatient chemotherapy.

Discussion: Burkitt's lymphoma usually presents in the U.S. as the non-endemic sporadic clinical variant. This variant presents most often in adults as GI bleeding in addition to involvement of the jaw or facial bones, which correlates with this patient's clinical presentation. The patient's work up was complicated by his previous diagnosis of cavernous sinus thrombosis being treated with anticoagulation, which initially explained his neurological symptoms and anemia. His physical exam findings were important in leading to the correct diagnosis. The admission physical revealed his ulcerated mandibular mass, which prompted the initial concern for malignancy. His worsening neurological symptoms despite anticoagulation led to repeat imaging that showed metastatic disease instead of thrombosis. In the end, the patient's systemic symptoms, cranial nerve impairments, mandibular mass, and anemia were all attributed to a singular etiology of Burkitt's lymphoma.

Jose Francisco De Melo Junior

Dr. Alicia Hinze

An Ominous Diagnosis

Case Presentation: A 48 y.o. woman presented to the ED at an outside hospital in early August due fever, abdominal pain, diarrhea, facial rash, and arthralgias. Symptoms started approximately 7 days prior to presentation during a cruise ship to the Galapagos Islands. She had a history of triple positive antiphospholipid antibody syndrome (APLS) and a recent diagnosis of bilateral DVT of the lower extremities, on warfarin, and rosacea, on minocycline. She had transitioned to enoxaparin injections twice daily in preparation for her international travel. In the ED, she was febrile with T 100.6o, but hemodynamically stable. Laboratory was significant for hemoglobin 12.4g/dL, platelet count 47,000/uL, white blood cell count 12.8g/dL, AST 142U/L, ALT 166U/L, total bilirubin 1.0mg/dL, alkaline phosphatase 132U/L, creatinine 0.73 mg/dL, CK 75U/L, CRP 270mg/L, ESR 129mm/h, and urinalysis with 182 RBC/HPF and albumin of 300mg/dL. Peripheral smear showed no schistocytes and haptoglobin was elevated at 240mg/dL. Chest x-ray revealed bilateral opacities. An extensive infectious disease workup including but not limited to mononucleosis, viral hepatitis, HIV, Erhlichia, Babesia, L An i worest

in improved condition.

Discussion: CAPS is an extremely rare condition and a life-threatening manifestation of APLS. It is the initial manifestation of half the diagnosis of APLS. It is characterized by widespread thrombosis that may lead to multi-organ dysfunction. The diagnostic criterion for CAPS includes the simultaneous development of three or more organ dysfunction in less than a week. Histopathologic confirmation of small vessel occlusion is necessary but often not feasible. Infections are the most common triggers, but withdrawal of anticoagulation or sub-therapeutic anticoagulation, as occurred to our patient, are also common precipitates. Treatment for APLS is not well defined but usually involves steroids, intravenous immunoglobulins or plasma exchange therapy, and a steroid-sparing agent, such as eculizumab or rituximab.

Elizabeth Doll
Dr. Matthew Ho

Recurrent Pneumaturia in a 58-Year-Old Man

Case Presentation: A 58-year-old man with a history of benign prostatic hypertrophy (BPH), erectile dysfunction, and previous Staph epidermidis UTIs, presented to clinic with recurrent urinary tract infections (UTIs). He reported four symptomatic UTIs in the past six months, with severe dysuria, frequency, and sensation of incomplete voiding. All were nitrite-positive with large leukocyte esterase, WBCs, and bacteria on urinalysis with microscopy, and Klebsiella pneumoniae with >100,000 CFU in urine cultures. Antibiotic courses included: Levofloxacin x7 days, Cefdinir BID x7 days, extended to 14 days due to persistent symptoms, and a second course of Cefdinir x7 days, all based on culture sensitivities. Severe dysuria and frequency would return within days to weeks after treatment completion. He also reported intermittent pneumaturia, not always associated with UTI episodes, and experienced gradual worsening of his obstructive symptoms despite increased tamsulosin. Eventually, this patient developed decreased semen output with ejaculation, mild perineal pain, and was found to have prostatic tenderness on examination, which finally led to the diagnosis of chronic bacterial prostatitis (CBP).

An empiric 6-week course of Ciprofloxacin BID was initiated. However, he developed severe diarrhea (*C. difficile* negative) and full-body hives, requiring cessation of treatment. A post-prostatic massage urine culture obtained to inform subsequent antibiotic selection grew Staph epidermidis, which was suspected to be an additional contributor to his CBP based on its resistance profile. Trimethoprim-sulfamethoxazole BID was initiated to treat the Klebsiella, along with Daptomycin once daily to treat the Staph epidermidis, per recommendations from Infectious Disease. Urology saw the patient for management of his BPH, prostatitis, and assessment of pneumaturia during this time. CT urogram showed enlarged prostate with peripheral calcifications. There was a small air bubble at the bladder dome, but no air in the bladder wall and no enterovesical, colovesical, pvvvesicalsi52r

calcifications--management of which may make collaboration with Urology an important part of treatment and source control. Further, this case is an interesting example of a commonly causative organism of CBP, Klebsiella, causing an uncommon symptom, pneumaturia. First ruling out fistulous connection to the GI tract, and emphysematous cystitis or prostatitis is essential. CBP requires 4-6 weeks of antibiotics with prostatic penetration, such as fluoroquinolones, trimethoprim-sulfamethoxazole, tetracyclines, or macrolides, tailored based on organism susceptibilities and patient allergies.

Michael Downey
Dr. Kellen Albrecht
Dr. Andrew Olson

Heyde-ing in Plain Sight: Acquired von Willebrand Deficiency due to Aortic Stenosis

flexor surfaces of the arms. Diagnosis of bullous pemphigoid requires a compelling clinical scenario and is definitively made by diagnostic histology of a representative lesion. Skin biopsy sent for routine processing should reveal a subepidermal split with an eosinophil rich inflammatory infiltrate, with biopsy sent for direct immunofluorescence revealing linear C3 and IgG deposition along the epidermal basement membrane zone. In this case, we will describe a classic case of bullous pemphigoid, where a small cluster of

of lower abdominal pain and bilateral lower extremity weakness, pain and numbness. Initial neurological exam revealed intact strength but did reveal reduced perianal sensation with normal anal tone. The patient was COVID-19 positive without respiratory symptoms and a CT of the abdomen ruled out intra-abdominal pathology. The patient was discharged and subsequently returned to the ER with the same symptoms as well as acute urinary retention. Neurology was consulted and on repeat examination the patient was found to have 4/5 strength in the lower extremities. He was found to have significant social stressors with the recent death of his father and cousin. He received a diagnosis of functional disorder and was recommended to be discharged with outpatient follow up. His lower extremity weakness continued to worsen, and the patient was reassessed by a different neurologist who recommended an MRI of the lumbar spine which was normal. The second neurologist agreed with the diagnosis of functional disorder. The patient was then admitted to the medicine team due to inability to walk and persistent urinary retention. On day 2 of admission and on reassessment by a

Upon examination the patient was afebrile, tachypneic with mild exertion requiring 2L nasal cannula (baseline room air) and speaking in short sentences due to coughing bouts. Physical exam pertinent for fine crackles bilateral lower lung fields without associated wheezing or crackles. Laboratory evaluation pertinent for WBC 20.6 x 10⁹/L (baseline 35 x 10⁹/L, with 3.6 neutrophilic predominance), normocytic anemia Hgb 8.8 (baseline 11 g/dL), and hyponatremia 133mEq/L (baseline 135mEq/L). Chest x-ray showed increased perihilar interstitial opacities bilaterally most notable in the lower lungs. A broad infectious workup with sputum testing and bronchoscopy with bronchoalveolar lavage was unrevealing. Bronchoscopy only pertinent for vocal cord edema. Given negative infectious workup, Acalabrutinib was discontinued and oral corticosteroids were started due to concern for grade 3 DIP. Over the next few days his symptoms and oxygenation improved.

Discussion: DIP can be challenging to diagnose due to vague presentations. The complexity increases in immunosuppressed patients on antineoplastic agents as their nonspecific symptoms and imaging studies could be multifactorial, often delaying diagnosis[4].

Our patient developed a progressive cough shortly after initiation of Acalabrutinib which appeared to be grade 3 pneumonitis. This appears to be a very rare AR of this medication, as review of a pooled assessment of safety for Acalabrutinib, based on 9 randomized clinical trials, indicated the incidence of grade 3 or higher pneumonitis was 0.3% and the incidence of pneumonitis of any grade was 1%[2].

Patients with B-cell malignancies are often candidates for therapy with BTKi such as Acalabrutinib. However, it is important to have a high index of suspicion for ARs that require change in therapy. Factors holding patients back from receiving effective doses and treatment maintenance include drug toxicity and tolerability, as was seen in this case[1].

**Tesfatsiyon
Ergando**

Dr. Bellony
Nzemenoh
Dr. Abdisamad
Ibrahim

A Rare Coincidence, Causation or Correlation? Pseudoaneurysm & Pulmonary Embolism

Case Presentation: A 75-yo, M, hx AF and provoked b/l PE on apixaban presented to the ER following 3 pre-syncopal episodes and acute sharp, central abdominal pain. VS; HR- 110, BP- 74/49 , hemoglobin of 11 g/dl. He was given 3 liters of crystalloid and one unit of PRBC. CT of the abdomen showed a retroperitoneal hemorrhage and hemoperitoneum.

General surgery and IR were consulted and deferred surgical intervention given no overt site of extravasation. The following day, Hb dropped from 11 to 6 and the Pt unstable with HR in 120s-140s, and BP 70/50, pt was transferred to ICU.

Days following this, he developed dyspnea (needing 2 L supplemental oxygen), tachycardia (150s), and tachypnea (26) with asymmetric LE edema. U/S confirmed a DVT, extending from the L femoral vein to the level of the ankle. CT showed a sub massive PE and signs of right heart strain. Ultimately, a CTA showed a 1.4cm x 0.9 cm gastroduodenal artery pseu

to apixaban 10 mg orally twice a day for 7 days, then to 5 mg orally twice a day.

Emily Ewan
Dr. Demetrios
Andrisani
Dr. Chrisanne
TimpeDupuis

Heart Failure at Home: Safe and Effective Management of an Acute Heart Failure Exacerbation in a Home-Based Acute Care Setting

Introduction: Heart failure is the leading cause of hospitalization in adults over the age of 65, and hospitalizations account for more than 70% of the annual cost of heart failure care. Particularly in the first few months after diagnosis, patients and their families struggle to understand and cope with the complexities of the disease, leading to dietary indiscretions, medication non-adherence, and confusion that contributes to high readmission rates. A recent trend to diurese patients to dry weight in the hospital has contributed to prolonged lengths of stay, further exacerbating hospital capacity issues and frustrating patients. The HealthPartners Hospital@Home (H@H) program aims to identify these patients early in their treatment course and complete their acute care in the home, where social determinants can be incorporated into the plan of care.

Care Presentation: Here we present the case of a 63-year-old man with a past medical history of coronary artery disease, aortic insufficiency, chronic kidney disease, and recently diagnosed ischemic cardiomyopathy with an ejection fraction of 45% who was admitted to the hospital with acute kidney injury, dizziness, and falls in setting of medication titration. This was his third hospitalization in a span of 4 months since his initial diagnosis of heart failure. On admission, he was noted to be orthostatic and bradycardic, was seen by cardiology who felt chronotropic incompetence could be contributing, and his beta blocker dose was reduced with improvement in symptoms. As he was 20 pounds over his dry weight with increasing peripheral edema, he was started on IV diuresis for an acute heart failure exacerbation. His creatinine and electrolytes remained stable and he was transitioned to home with the H@H program to continue diuresis to dry weight. Through H@H, he had twice daily visits from a community paramedic (CP) who collected vitals (including intake/output) and blood work to monitor kidney function and electrolytes, and administered IV furosemide. The patient additionally had daily virtual visits with a hospitalist who added metolazone to augment diuresis as he remained >10 pounds above his dry weight on H@H day 3. Throughout the H@H course, patient and his wife received regular education and assessment of adherence to dietary restrictions by CPs. His weight did fluctuate, but with close monitoring and reinforcement, the patient was able to appreciate how changes in fluid and salt intake affected his weight and activity tolerance. On H@H day 8, lab monitoring revealed increasing creatinine, and diuretics were held over the subsequent days with improvement in kidney function. Oral diuretics were safely restarted on H@H day 15, and the patient was ultimately discharged from H@H on day 17 a few pounds above his dry weight, saving him over 2 weeks of time in the hospital.

References:

[q71.91 147.15C,hs20(ki)-4(dne)9(y)22()] TJETQq166.87 119.54 353.18 619.

increased incidence of bowel carcinoma and rare types of cancer, such as carcinoid tumors, are also more prevalent in patients with IBD. The relationship between carcinoid tumors and IBD is not well understood but is hypothesized to be related to chronic mucosal inflammation. However, not all cases of carcinoid tumors are located at the anatomical sites of active inflammation. It is unclear whether such an association is coincidental due to increased incidental findings during endoscopy and surgery or if common pathogenesis exists. Carcinoid tumors of the small intestine preceding the development of Ulcerative Colitis (UC) are particularly rare.

Case Presentation: A 58-year-old female with a history of tubular adenomas underwent a surveillance colonoscopy to discover a three-millimeter semi-pedunculated polyp located ten centimeters from the ileocecal valve in the terminal ileum. After polypectomy, histology revealed evidence of a carcinoid tumor. A follow-up CT scan one month later revealed a 2.2 cm enhancing polypoid mass in the distal ileum and enlarged mesenteric lymph nodes. An ileocelectomy and elective cholecystectomy were performed, with pathology revealing a 2.2 cm, well-differentiated neuroendocrine tumor with five positive mesenteric lymph nodes. PET-CT scan did not show evidence of metastatic disease. The final oncologic stage was Stage III (pT3pN1cM0).

Following her surgical resection, the patient developed chronic diarrhea for one year. She was treated with cholestyramine for suspicion of bile acid diarrhea due to terminal ileum resection and previous cholecystectomy. After worsening abdominal pain, hematochezia, and fatigue, a CT scan showed pancolitis with mesenteric lymph node enlargement. Subsequent sigmoidoscopy revealed diffuse colonic inflammation with histology demonstrating moderate chronic colitis without granulomas or dysplasia. Infectious causes of colitis were excluded. The patient was diagnosed with

hypertension and hyperlipidemia presented to the Emergency Department (ED) with the chief complaint of altered mental status ongoing for the past six hours. Memory deficits included inability to recall the events of the past 48 hours. No systemic symptoms or history of head trauma was present. His medications included Lisinopril 20 mg daily and Atorvastatin 40 mg daily. On physical exam, the patient was hypertensive to 156/79, but otherwise, vital signs were within normal limits. Mental status exam showed the patient was alert and oriented to person and place but not to time or events in the last 48 hours only. Language, comprehension, and speech were normal as well as his knowledge of personal identity. His neurologic exam was non-focal. Workup in the ED was unremarkable including CBC, BMP, PT/INR, Troponin, TSH, VBG, Acetaminophen & Salicylate levels, ethanol level, ECG, CT head, chest x-ray.

The patient was admitted to the hospital for further observation and management. EEG did not show any epileptiform discharges. MRI brain with and without contrast demonstrated a 3 mm focus of restricted diffusion

presented several times to emergency rooms, a dentist, and an ophthalmologist that collectively resulted in several failed treatments including antibiotic ointments, oral antibiotics, and tooth extraction. On this presentation, exam revealed unilateral left eye proptosis. The remainder of the physical exam and basic laboratory workup was unremarkable. MRI revealed a diffusely infiltrating mass involving the left orbit. Ophthalmology and ENT were consulted and felt the mass was most concerning for malignancy or infection and brought the patient for nasopharyngoscopy and needle biopsy. The sample was non-diagnostic so the decision was made to perform surgical biopsy via lateral orbitotomy which revealed dense fibrous tissue with a high percentage of IgG4+ plasma cells, suggestive of IgG4-RD. Serum IgG subclass analysis was then performed which revealed a lone elevation of serum IgG4. Because of known possible involvement of other organs with IgG4-RD this patient underwent CT CAP with contrast which identified asymptomatic aortitis. The patient was initiated on a prednisone taper and had near complete resolution of orbital symptoms.

Conclusion: This case illustrates the variable presentation of IgG4-RD and the importance of its early inclusion on the differential diagnosis for any new mass or fibrosis. Its ability to mimic other conditions amplifies the importance of early recognition and diagnostic persistence. This patient underwent several inappropriate treatments during the 8 months prior to diagnosis and multiple biopsies were required to confirm the diagnosis due to the initial needle biopsy being insufficient. Sampling error is a known flaw of needle biopsy and is particularly likely in IgG4-RD given its typical patchy storiform fibrosis that can be missed by a needle (1, 2). Additionally, as seen in this patient and as has been demonstrated in the literature, IgG4-RD is a systemic disease not isolated to one organ at a time (4). If IgG4-RD is identified or suspected, it may be reasonable to screen for involvement in other parts of the body

Luis Gasca
Dr. Jack McHugh

When Good Arteries Go SCAD

Background: Spontaneous coronary artery dissection (SCAD) is an established, but uncommon cause of acute myocardial infarction with non-obstructive coronary arteries. SCAD has historically been underdiagnosed and there is an incomplete understanding of this disease. Here we present a

coronary syndrome, but without underlying obstructive lesions in the coronary vasculature. Most cases occur in postmenopausal women, and presentation is typically preceded by physical and/or emotional stressors. Notably, no cases following straining for rectovaginal prolapse assessment have been previously described. TTE reveals a reduced LVEF and most commonly shows apical dyskinesia of the left ventricle, although multiple variants exist, including mid-ventricular, basal, and focal patterns. A key finding on TTE are regional wall motion abnormalities not confined to a single coronary territory. Cardiac catheterization should be performed to rule out obstructive coronary pathology, including spontaneous coronary artery dissection and embolic disease, both of which can present similarly.

While the pathophysiology is uncertain, SCM is thought to result from

	<p>and heme-onc was consulted. He was severely neutropenic with an ANC of 0, platelets 19,000, WBC 1.46, and fibrinogen 746. At which point he was given blood products for the bleeding and started on broad spectrum antibiotics with prophylaxis for opportunistic infections. Initial picture concerning for DIC secondary to APL, but flow cytometry was positive for B cell ALL. He was on maintenance fluids already with concern for TLS as patient was in a blast crisis and elevated uric acid. Heme-onc discussed a possible clinical trial that may help the patient at the University of Minnesota, as patient was relatively stable on Levophed, it was determined that he would transfer.</p> <p>Discussion: This case illustrates the medical urgency of a hyperleukotic state given the clinical severity of the patient. It highlights the necessity for protocol in stabilization of critically ill patients to avoid premature closure, as he was initially presumed to be in anaphylaxis. Furthermore, while epidemiology can be a useful tool for diagnostic patterns, atypical presentations must be considered to avoid delays in care. While this patient age was atypical for ALL, his flow cytometry resulted quickly, and we were able get him to appropriate treatment.[2]</p>
<p>Naima Hashi Dr. Jack McHugh</p>	<p><i>Inflammatory Bowel Disease in the Elderly Population</i></p> <p>Introduction: The differential for chronic diarrhea is broad. It is important to keep inflammatory bowel disease (IBD) in the differential even in elderly patients. The occurrence of IBD in elderly individuals appears to be rising by 5.2% annually and up to 15% of IBD in North America and Asia is diagnosed after the age of 60 years (Taleban, 2015).</p> <p>Case Description: An 84-year-old female with a past medical history of hypertension and type 2 diabetes presented with a two-month history of non-bloody diarrhea, up to 10 episodes a day. She had associated nausea, decreased appetite, abdominal cramping, and an unintentional 20 lb weight loss. She was hospitalized one month prior for similar symptoms; at which time she was found to have <i>Clostridioides difficile</i> infection. She completed a course of oral vancomycin and continued to have loose stools. Several PCR tests for <i>C. difficile</i> were negative.</p> <p>On presentation, patient was afebrile and hemodynamically stable. She had mild diffuse tenderness of her abdomen; otherwise, the physical examination was unremarkable. The patient's labs were pertinent for C-reactive protein (CRP) 112mg/L, white cell count 10.0x10⁹/L, stool calprotectin 125mcg/g (from 2700mcg/g three weeks prior) and repeat <i>C. difficile</i> PCR was negative. Due to the elevated inflammatory markers, she underwent a colonoscopy which revealed mucosal changes consistent with active ulcerative colitis. She was diagnosed with ulcerative colitis, likely triggered by her prior <i>C. difficile</i> infection.</p> <p>The patient was initiated on intravenous methylprednisolone for 3 days. Symptoms improved and her C-reactive protein downtrended. She was transitioned to oral prednisone 40 mg and discharged with close follow-up in the department of Gastroenterology and with plans to start biologic therapy in the outpatient setting.</p> <p>Discussion: It is important to have a broad differential for chronic diarrhea. Chronic diarrhea can be broken down into three categories: inflammatory (infection and autoimmune), fatty (malabsorption), and watery (secretory and</p>

treated, his hypertension came under better control. This highlights the need to at least consider uncommon causes of hypertension.

Mason Hinke

Anaplasmosis Presenting as Atrial Fibrillation with Rapid Ventricular Response

Background: Anaplasmosis is a tick-borne illness most commonly seen in the northeastern United States and Wisconsin. There were over 5,000 cases in 2017 but this is likely under reported. Patients most commonly present with nonspecific symptoms such as fever, malaise, myalgia, headache and arthralgia.

Methods: The patient in this case is a 61-year

Case presentation: A 43-year-old woman with AA-type renal amyloidosis

epigastric tenderness and he was spitting oral secretions into an emesis bag due to odynophagia.

Diagnostic Evaluation: Pertinent labs included a white blood cell count of 13.4 per μL , bicarbonate of 15 mmol/L, anion gap of 40, beta hydroxybutyrate of 4.4 mmol/L (ref <0.4), urine ketones markedly positive at >160 mg/dL, and lactate of 5.3 mmol/L (ref 0.5-2.2). Esophagogastroduodenoscopy was performed and biopsies were taken confirming the diagnosis of acute esophageal necrosis.

Management: The patient was managed with intravenous fluid resuscitation, electrolyte repletion and a proton pump inhibitor. His symptoms gradually improved and his oral diet was advanced over the course of three days.

Discussion: Black esophagus, formally known as acute esophageal necrosis is thought to be caused by combined ischemic injury and direct mucosal injury resulting from gastroesophageal reflux or other insults. This patient likely suffered hypoperfusion secondary to volume depletion from alcohol consumption and vomiting and direct mucosal injury from gastric contents and severe alcoholic ketoacidosis. The distal esophagus is often more affected, possibly due to less robust blood supply and increased gastric acid exposure. Diabetic ketoacidosis has been previously identified as a risk factor suggesting the metabolic state of ketoacidosis might play a key role in the pathogenesis. Treatment is supportive with fluid resuscitation, proton pump inhibitors, and management of underlying conditions. Complications include esophageal perforation and stricture. Mortality rates may exceed 30%.

Azithromycin has fewer side effects (7), is well tolerated, and achieves a good response in treatment (8). The optimal duration of therapy is unknown, but most patients are treated for a minimum of six months (3).

Introduction: Ischemic gastritis is a rare disease with high mortality, often requiring urgent medical and surgical interventions. Patients presenting with this condition often have either compromised gastric perfusion or extensive gastric distension. Unlike other parts of the gastrointestinal tract, ischemia of the stomach is uncommon due to its rich blood supply.

Case presentation: A 75-year-old male with a history of gastric and bowel dysmotility secondary to cerebral palsy, partial colectomy with a colostomy, and chronic back pain on NSAIDs came to the emergency department with abdominal distension, pain, vomiting, dysuria, and loose stools. At presentation, the patient was afebrile, hypotensive, and tachycardic with metabolic acidosis, mildly elevated lactic acid, leukocytosis, normal liver function, and normal lipase. CT imaging with contrast showed significant gastric gas and distension with portal vein gas, and patent celiac artery and branches. General surgery and gastroenterology were consulted early. Efforts to decompress the distended stomach were initiated immediately with the aid of a nasogastric tube and low intermittent suction. In addition, high-dose intravenous pantoprazole and antibiotics (ceftriaxone and metronidazole) were started. Abdominal distension and pain were significantly improved immediately following the initiation of decompression. Upper endoscopy findings were consistent with ischemic necrosis of the greater fundus and body of the stomach with areas of hemorrhage. Pathology results were consistent with gastritis and negative H pylori.

By the third day of admission, patient was able to tolerate small quantities of clear liquid; however, diet could not be progressed beyond clear liquids due

for hypertension, gout, Raynaud's phenomenon, and post-traumatic stress disorder presented to the emergency department with dyspnea and cough. Six years prior to this presentation, he had a chest CT for lung nodule surveillance showing a trace pericardial effusion, although he was asymptomatic at the time. Chest x-ray revealed an enlarged cardiac silhouette. CT scan and an echocardiogram demonstrated a moderate pericardial effusion. The patient was started on colchicine and indomethacin for effusive pericarditis and was discharged. His dyspnea progressed, and a follow-up echocardiogram three months after the initial presentation demonstrated enlargement of the pericardial effusion with diastolic compression of the right ventricle and echocardiographic features of cardiac tamponade. The patient was emergently transferred to our hospital and underwent pericardiocentesis. A total of 470 ml of yellow fluid was removed with elevated protein and normal white blood cell differential. Labs were notable for mild neutrophilic leukocytosis with normal inflammatory markers. Pericardial fluid cultures were negative and auto-immune work-up was unremarkable; however, cytology was notable for mesothelial hypercellularity, generating concern for malignant pericardial effusion. The patient had a repeat CT of the chest that demonstrated no evidence of pleural disease. To further evaluate the etiology of his effusion, he underwent pericardial biopsy with a pericardial window. The pericardial biopsy showed areas of chronic inflammation and focal mesothelial hyperplasia with papilla formation without evidence of malignancy. He was seen in the clinic 3 weeks after hospitalization and was in good health reporting resolution of chest pain and no recurrence of dyspnea. The patient had served as a veteran in Vietnam near the Mekong delta, had a 50-year history of smoking, and did not have any family history of mesothelial malignancies. He is unaware of whether he had agent orange exposure.

Conclusion: This case describes a highly unusual cause of cardiac tamponade due to a slowly enlarging pericardial effusion secondary to focal mesothelial hyperplasia, that, to the best of our knowledge, has not been reported in the literature before. This case underlines the importance of pericardial biopsy in the diagnosis and prognostication of pericardial neoplasms, as cytologic evidence of mesothelioma may be misleading in the absence of concomitant pleural disease. Moreover, it highlights the absence of evidence regarding the optimal follow-up and management of incidental pericardial effusions, pointing to the need for a comprehensive re-evaluation of current practice and establishment of clinical guidelines.

Ameya Kumar

Disseminated Gonococcal Infection as a Cause of Polyarthritits in a 61-Year-Old Male

Introduction: Disseminated gonococcal infection is a common cause of polyarthritits. Approximately 0.5% to 3% of patients who are infected with N. gonorrhoeae develop disseminated gonococcal infection (DGI). Historical data in the 1980s show that N. gonorrhoeae were associated with up to 14% of patients who have arthritis.

Case description: A 61 year old with history of ground level mechanical fall was admitted to the hospital with complains of polyarthralgia , weakness and subjective fever and chills. Initial labs were notable for an elevated WBC cpunt of 31,000. He was thought to have sepsis from an unclear source. Rheumatology was consulted for polyarthralgia. Most of the joints were

(aTTR), either wild type (wtATTR) or hereditary (haTTR), is due to a misfolded liver protein called transthyretin. A Mayo Clinic study in 1992

developed recurrent right-sided transudative pleural effusions which were managed with Prednisone 10 mg daily and monthly thoracenteses for alleviation of dyspnea. Two years prior to presentation he developed lymphedema in the lower extremities and thickened yellow fingernails. Unfortunately, his pulmonary disease continued to progress, and he developed a left-sided pneumothorax and right hydropneumothorax, prompting presentation to our institution.

Examination at time of admission was notable for bilateral non-

management of chest pain. The course was complicated with RUE DVT from the PICC line, that was likely present on admission, and PICC line associated MRSA bacteremia. Infectious Disease was consulted. Patient was started on Vancomycin and Cefazolin, later switched to Daptomycin. PICC line was not initially removed due to the Milrinone Infusion. Repeat blood cultures after 48 hours had not cleared the infection. After discussion with Infectious

within normal limits. Initial cardiac index by echocardiography was low at

improved following plasmapheresis, IV steroids and diazepam and ultimately discharged home with a steroid taper and diazepam. She is currently undergoing Rituximab therapy and long term steroid taper through outpatient Neurology.

Discussion/Learning Points: Stiff person syndrome is an insidious, rare disorder with an often several year delay to diagnosis. It is frequently misdiagnosed as a psychiatric or a functional neurological disorder. Recognizing the progressive neurologic symptoms of SPS and a broad autoimmune work-up including GAD65 antibody were key to diagnosis within the first year of symptom onset. Benzodiazepines are crucial first line

Conclusion: Older patients more commonly have an atypical presentation of acute coronary syndrome including syncope being the sole presenting symptom. This case illustrates the difficulty in differentiating syncope due to NSTEMI in elderly patients from cardiac arrhythmia etiology. A comprehensive an

or longer, nonpruritic macular or maculopapular rash, leukocytosis of $10,000 \times 10^9/L$ or greater, with at least 80 percent granulocytes. Minor criteria include sore throat, lymphadenopathy, hepatomegaly, splenomegaly, abnormal liver function studies, and negative tests for ANA and rheumatoid factor.

Jordan Nunnelee
Dr. John Bretzman

Cavitary Lung Lesions: A Broad Differential

Introduction: Pulmonary cavitary lesions can be caused by a wide variety of pathology. We present a case of pulmonary cavitary disease that led to broad workup and ultimately found a disease infrequently encountered in the United States.

Case Description: A 53 year-old gentleman with no known medical history presented with a 2.5 month history of unintentional weight loss, night sweats, chills, and productive cough. His symptoms began shortly after returning from a three-month trip to Senegal. He denied hemoptysis, gastrointestinal symptoms, musculoskeletal pain, neurologic symptoms, chest pain, dyspnea, or rashes. He smoked 1.5 packs of cigarettes per day for decades. He was in a monogamous heterosexual relationship, did not use IV drugs, and had no other relevant exposure history.

He was admitted to the hospital, and was febrile to 39.1 C, tachycardic, and tachypneic with normal blood pressures. His exam was significant for cachexia, coarse rales in left lobes more than right, with stridor in anterior lung fields on inspiration. CT angiogram of the chest was completed and negative for pulmonary embolism. However, he did have extensive upper-lung-predominant cavitary lesions and tree-in-bud micronodularity in the left greater than right lobes. He was started on broad spectrum antibiotics and placed in a negative pressure room.

Our differential for his cavitary lesions included infectious, auto-inflammatory, and malignant diseases. Considering his recent travel history, evaluation for tuberculosis with three separate sputum samples including acid fast staining, mycobacterial culture, and tuberculosis PCR were obtained. Blood was sent for mycobacterial and routine bacterial/fungal culture. We investigated histoplasma, blastomyces, and cryptococcus with urine and serum antigen/antibody testing. We considered MRSA necrotizing pneumonia with a MRSA swab. Due to lack of IV drug use history and absence of murmur on exam, we deemed endocarditis causing septic emboli and necrosis less likely. We considered malignancy due to his smoking history. ANCA associated vasculitis was also on the differential, for which MPO and PR3 antibody testing were obtained

Ultimately, his sputum stain was positive for acid-fast bacilli, and tuberculosis PCR was positive without rifampin resistant mutations. He was initiated on rifampin, isoniazid, pyrazinamide, and ethambutol (RIPE) therapy for at least 6 months. Broad-spectrum antibiotics were discontinued.

Discussion:

secondary malignancies, lymphoma, and ANCA associated vasculitis
Patients with nonspecific symptoms should have a broad workup so as not to delay treatment and to provide the best patient care.

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Spontaneous Hemorrhagic Pericardial and Pleural Effusions - A Kale Story

Introduction: In nonvalvular atrial fibrillation, options for anticoagulation include direct-acting oral anticoagulants aka DOACs and warfarin. The latter includes frequent lab draws and issues with drug interactions. Leafy, green vegetables change the activity of warfa

	<p>disorders associated with CGD include systemic lupus erythematosus (SLE) and juvenile idiopathic arthritis (JIA). In this report, we are the first group to describe a patient who developed cutaneous small vessel vasculitis (CSVV) after ferumoxytol infusion highlighting the intricacy of inflammatory response in the patient with CGD.</p> <p>Case summary: 36 year old female with past medical history of CGD and bronchiectasis secondary to recurrent pulmonary infection with multidrug resistant <i>Aspergillus niger</i>. This patient presented with upper and lower extremity rash concentrated around bilateral elbow 5 days after IV infusion of Feraheme (ferumoxytol) for iron deficiency anemia at bilateral antecubital fossa. Patient reported acute worsening of chronic joint pain in conjunction with swelling of bilateral elbow 3 days after infusion. This was resolved in < 24 hours with aspirin and diphenhydramine. The following day the patient noted pinpoint red spots in bilateral upper extremities which increased in number, coalesced and eventually developed similar rashes in lower extremities. Patient denies any other systemic symptoms such as fever or viral prodrome. No documented allergy to IV or oral iron supplements. No recent change in the medications except for IV iron infusion as described above. Broad autoimmune and viral/bacterial/fungal workup were non-reactive. Skin punch biopsy showed leukocytoclastic vasculitis (LCV) with subtle IgA, C3 and fibrinogen granular deposition within the superficial blood vessel wall. Patient was discharged on topical treatments with triamcinolone and a 5 day course of systemic steroids with significant improvement in rashes and symptoms of joint pain at 1 week follow-up.</p> <p>Discussion: Patient's clinical picture as well as pathological findings are consistent with IgA mediated leukocytoclastic vasculitis which is characterized by IgA deposition accompanied with neutrophil recruitment and inflammation. The condition is a reactive process and occurs 5-10 days after exposure to the offending culprit. Typically, both proteolytic enzymes and reactive oxygen species (ROS) can be responsible for local and systemic damage, though in this patient ROS would be unlikely given her history of CGD. This is likely the reason behind the cutaneous limited phenotype of presentation. This is also the first case report of CSVV as a reaction to ferumoxytol (Iron oxide coated polyglucose sorbitol carboxymethyl ether) infusion. This carbohydrate compound is different from previously reported CSVV related to iron dextran which is a liquid complex of ferric hydroxide and dextran.</p>
<p>Lucas Ramsey Dr. Amy Holbrook</p>	<p><i>An Ovarian Source of Cor Pulmonale</i></p> <p>Introduction: Patients with BRCA mutation are at increased risk for ovarian and breast cancers among others. Prophylactic bilateral salpingo-oophorectomy (BSO) is an option for patients to reduce the risk of ovarian cancer by up to 96%. We report an unusual presentation of metastatic ovarian cancer in a BRCA+ patient who had undergone prophylactic BSO.</p> <p>Case Presentation: A 42 year old woman presented to her outpatient provider with 6 weeks of progressive dyspnea on exertion. Her history was pertinent for BRCA1 mutation s/p prophylactic bilateral salpingo-oophorectomy. Echo revealed severely reduced RV function and severely increased pulmonary artery pressure, and she was admitted to the hospital for concerns of pulmonary hypertension and cor pulmonale. On admission, she was requiring 4 L supplemental O2 to maintain saturations. Otherwise vitals unremarkable. Labs were notable positive troponin and new</p>

	<p>decisions about palliative chemotherapy which itself includes checkpoint inhibitors as options.</p> <p>Discussion: The use of immune checkpoint inhibitors will continue to increase, and in combination with other agents the patterns of irAEs are expected to become more complex. Conscientious assessment of medication exposures and recognition of associated toxicities is crucial to provide prompt treatment and reduce morbidity and mortality associated with these therapies. Identification and management of irAEs may require a complex multidisciplinary approach along with close monitoring and use of significant clinical resources as exemplified above. Prognosis and course of illness will be defined by the organ system that is affected. Toxicity is graded in severity per recent guidelines and discontinuation of these medications requires weighing the potential benefits and risks in each treatment scenario paired with a shared decision-making model. When there is exposure to these medications a high level of suspicion must be maintained that any new symptoms can be treatment related.</p>
<p>Bibek Saha Dr. Joshua Daum Dr. Thomas Beckman</p>	<p><i>Malaria and Chikungunya Co-Infection in a Traveler Returning from Sudan</i></p> <p>Introduction: Globalization and increased international travel have made the diagnosis of infectious diseases outside of their known endemic regions not uncommon. Vector-borne illnesses including chikungunya, dengue, and malaria, with common species such as Plasmodium (P.) falciparum, P.vivax, and P.ovale, are known to have shared endemic profiles predominantly in tropical regions such as Asia, Africa, and Central and South America. Similarly, all three diseases present as an acute febrile illness and may have other overlapping symptoms including fatigue, headache, nausea, and myalgias. Here we present a rare case of a returning traveler diagnosed with P.falciparum and chikungunya, with a possible third co-infection with P.vivax/ovale.</p> <p>Case Presentation: A 52-year-old male presented with a 2-day history of fever, chills, fatigue, diaphoresis, headache, chest pain, decreased appetite, abdominal pain, diffuse myalgias of the back, neck, and extremities, and brown urine. He denied arthralgias. He recently traveled to Sudan, without taking antimalarial prophylaxis. While in Sudan, he was bitten by mosquitos, and 3 weeks prior to presentation (PTP), he developed this same symptomology and was diagnosed with Malaria. He was treated with quinine and dexamethasone with symptom resolution 2 weeks PTP.</p> <p>On exam, the patient was initially afebrile (37.7°C) but subsequently developed a fever (38.9°C), tachycardic (110bpm), normotensive (112/69mmHg), tachypneic (21breaths/min) with an oxygen saturation of 99%. He had abdominal tenderness and diffuse back tenderness from the neck to the lumbar region. There was no scleral icterus or jaundice.</p> <p>Initial labs showed decreased hemoglobin (12.7) and platelets (81), but increased LDH (277) and total bilirubin (3.1, 2.7 being indirect bilirubin). Peripheral smear did not show schistocytes. Giemsa-stained blood smears was positive for P.falciparum infection (0.59% parasitemia). The patient was diagnosed with uncomplicated mild malaria, ID was consulted, and he was started on a 3-day course of Artemether-Lumefantrine.</p> <p>During the 3-day hospital course, the patient was mostly afebrile, with the parasitemia percentage down-trending (day2:0.46%; day3:0.33%). On day 3</p>

(patient had received 2/3 doses of Artemether-Lumefantrine), he felt well and was adamant about discharge. Just prior to discharge, the smear suggested a possible co-infection with *P. vivax/ovale*. Post-discharge, serologies of other vector-borne diseases was positive for chikungunya (IgM+, IgG+), and suggested a prior infection with dengue (IgG+, IgM-). Unfortunately, the patient did not follow-up with his PCP.

Conclusion: Here we reported, to our knowledge, the 2nd case of *P. falciparum* and chikungunya co-infection diagnosed in the US, and possibly the first case of a triple infection with *P. vivax/ovale*. This case highlights that in a febrile patient with a recent travel history to endemic regions, a high clinical suspicion of vector-borne infectious diseases is warranted. Additionally, our case emphasizes the ever-expanding knowledge base that Physicians need to possess of infectious agents on a global scale.

Rachel Salz

The Eyes Have It, At Any Stage: Considering Ocular Syphilis

Introduction: Known as the “great imitator,” syphilis infrequently presents with ocular symptoms including anterior/posterior/panuveitis, interstitial

Introduction: Acute eosinophilic pneumonitis (AEP) is an uncommon diagnosis that was first described as a cause of acute respiratory failure in 1989. The etiology of this pathophysiology is unknown with most diagnoses of AEP either related to recent onset of smoking, inhaled antigens, or drug induced.¹ Minocycline is a medication used to treat bacterial infections, acne vulgaris, and moderate to severe rosacea and has documented case reports of inducing AEP. This case report demonstrates a prolonged diagnosis of AEP after missing minocycline on a medication reconciliation upon admission for an atypical pneumonia presentation.

Clinical Case: A 65-year-old female presented with a past medical history of extensive smoking history, atrial fibrillation, and recent diagnosis and completed treatment of community-acquired pneumonia with persistent symptoms of shortness of breath and dry cough. A computed tomography of the chest revealed multifocal ground glass opacities suspicious for atypical infectious etiology or inhalational lung diseases. Medications from the previous admission one week prior within the electronic medical record were reconciled but missed a new minocycline prescription from a private dermatology practice that was started one month prior.

The patient was then treated with a broader spectrum of antibiotics for suspected atypical pneumonia and despite this infectious treatment, the symptoms of shortness of breath and dry cough continued to worsen. Fungal, bacterial, and viral testing continued to result negative prompting completion of a bronchial-alveolar lavage (BAL). The cell count and differential from the BAL showed 80% predominance of eosinophils. After the procedure, a bottle of minocycline was found at the patient's bedside. The patient was asked about this

Dr.

Introduction: Post-transplant lymphoproliferative disorders (PTLD) are heterogeneous lymphoid disorders ranging from indolent polyclonal proliferations to aggressive lymphomas that complicate solid organ or hematopoietic transplantation (1). Multiple risk factors have been associated with the onset of PTLD such as age, reduced intensity conditioning, EBV serology mismatch and cytomegalovirus (CMV) reactivation (2).

Case Presentation: Our patient is a 68-year-old female with past medical history of ESRD secondary to SLE s/p DDKT x 2 (1991 and 2011), hypertension, and bilateral nephrectomies of native kidneys (2021) that presented with altered mental status and fever of 38.4C. Patient was started on vancomycin and meropenem with improvement in WBC and fever, patient underwent an extensive work-up for fever of unknown origin that was negative for Kikuchi's disease, Malaria, Babesiosis, Blastomycosis, Histoplasmosis, Coccidiomycosis, Cryptococcus, Coxiella, Toxoplasmosis, Tuberculosis, Brucellosis, Bartonella, amongst many others. She was discharged and presented three more times within two months for fevers and weakness in a cyclical manner every 3 weeks, with improvement after antibiotics in the hospital. Imaging showed multifocal lymphadenopathy especially in the cervical, mediastinal, and retroperitoneal lymph nodes. This led to a suspicion for a metastatic process, and she underwent EBUS of the mediastinal lymph nodes which came back negative for malignancy on flow cytometry and cytology. Our patient continued to have cyclical fevers and painless lymphadenopathy, which led to biopsy of retroperitoneal lymph nodes that came back positive for Polymorphic PTLD with destructive lymphoid cells seen on pathology.

The patient underwent multidisciplinary consultation and started guideline directed therapy for Polymorphic PTLD. Her immunosuppression regimen gradually decreased coupled with 4 weeks of Rituxan therapy with improvement clinically. Response to Rituxan will determine the need for chemotherapy in the future.

Discussion: This case emphasized the elusive nature of this disease, thanks to the persistent determination of the excellent providers that cared for this patient, the diagnosis was able to be achieved through multidisciplinary teamwork amongst multiple specialties. Many things struck this case as interesting and unique, for example the patient had chronic cyclical EBV levels since 2020 which are an independent risk factor for PTLD.

Of note, she had undergone bilateral nephrectomies of her native kidneys in 2021 due to concern for renal cell carcinoma after abdominal imaging showed multiple contrast enhanced foci during routine imaging for gastroenteritis.

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constellation of findings does not fit neatly into a single diagnosis, yet initial

alcohol use

background of renal cell carcinoma status post unilateral nephrectomy with peritoneal metastases who presented to hospital with new-onset ascites and acute kidney injury. Initial labs were notable for a macrocytic anemia with a Hb of 9.9g/dL (baseline 11.2g/dL), and acute kidney injury with creatinine 3.9 g/dL (baseline 2.3 g/dL). Magnetic Resonance and ultrasound imaging of the abdomen showed known abdominal disease, but no evidence of liver involvement. He underwent paracentesis which revealed a total protein of 2.1 g/dL with a SAAG of 2.1. A transjugular hepatic vein pressure gradient was measured which revealed a transhepatic pressure gradient of 11 mmHg, consistent with intrahepatic portal hypertension. A liver biopsy was performed concurrently which revealed diffuse hepatic infiltration by metastatic renal cell carcinoma. An EGD was performed which revealed grade 1 esophageal varices. He was treated with IV albumin and frequent paracentesis to optimize renal perfusion for possible hepatorenal syndrome. Despite this, his kidney function continued to worsen, requiring increasing doses of Lasix to maintain adequate urine output. He had a dialysis catheter placed and was initiated on intermittent hemodialysis. Ultimately, given his multiorgan failure, it was felt that systemic anticancer therapy was not within his goals of care. He had an abdominal pleurX catheter placed to manage his ascites and was ultimately discharged to hospice. He passed away one week after hospital discharge.

Discussion: This case outlines how in any patient presenting with new onset ascites, proper etiological workup is essential, even in cases where the pre-existing diagnosis suggests an obvious cause. In our patient, ascitic fluid studies led to the diagnosis of portal hypertension complicated by esophageal varices which had treatment implications. While renal cell carcinoma has been associated with malignant ascites, portal hypertension has only rarely been described as a complication from portal vein thrombosis. To our knowledge, this is the first case of hepatic infiltration by renal cell carcinoma leading to portal hypertension.

Yun Wang

mcg/ml. Repeat absolute reticulocyte count showed immediate positive response with an increase to $63.6 \times 10^9/L$ after the first dose of B12 injection. Pernicious anemia cascade returned after hospital discharge which revealed elevated methylmalonic acid level and the presence of intrinsic factor blocking antibody. The patient was diagnosed with pernicious anemia. Additional outpatient workup with CT chest, abdomen, and pelvis did not reveal malignancy, liver or spleen related pathologies that could explain her presentation. Follow-up labwork after the first week of B12 replacement showed improved hemoglobin at around 9 g/dL, normalization of WBC and platelet counts, and an increase in absolute reticulocyte count to $200.6 \times 10^9/L$.

Discussion: Vitamin B12 deficiency is well-known to cause macrocytic and megaloblastic anemia. Pancytopenia is less common but can be seen due to impaired DNA synthesis leading to ineffective trilineage hematopoiesis. This patient additionally presented with lab findings consistent with hemolytic anemia. However, her low normal reticulocyte count suggested the presence of a hypoproliferative process and therefore argued against hemolysis as a sole explanation for her anemia. Both intramedullary and extramedullary hemolysis associated with B12 deficiency have been observed and reported. Intramedullary hemolysis is due to the destruction of megaloblastic cells within the bone marrow, whereas the mechanism for extramedullary hemolysis is less clear. Reticulocyte count and index can be helpful in differentiating B12 associated intravascular hemolysis from thrombotic microangiopathy.

Alexander Xiao

A Rare Case of Recurrent Lipoid Pneumonia

Introduction: Exogenous lipid pneumonia is a rare condition caused by aspiration of lipid substances and classically characterized by fatty attenuation on chest CT. Diagnosis is difficult due to its insidious nature, nonspecific symptoms and clinical findings. A high index of suspicion and careful history taking is vital to helping guide appropriate treatment and reducing recurrence rates.

Case Presentation: A 91-year-old man in his primary care clinic endorsed one year of intermittent dyspnea. Chest x-ray revealed bilateral lower lung opacities and CT chest showed large opacities in both lungs suspicious for lung cancer, lymphoma, or pneumonia. Further history revealed that for the last year, the patient had been applying mineral oil to his CPAP mask to combat dry mouth. With this additional information, repeat CT chest identified classic findings of lipoid pneumonia including a “crazy-paving” pattern. The patient was diagnosed with lipoid pneumonia and counseled on ceasing mineral oil use and by follow up he was significantly improved. Three years later, he was admitted for hypoxia. He had recently been diagnosed with Zenker’s diverticulum and CT chest found both left lower lobe consolidation suspicious for aspiration, lung scarring and findings consistent with lipoid pneumonia. He now endorsed misting his mouth with an over

include use of oil nasal emollients, occupational exposure such as metal working, and e-cigarette use.

The clinical history is challenging as patients are typically asymptomatic with incidental imaging abnormalities or they may present with insidious, nonspecific symptoms, usually cough, dyspnea, or fever. Aspiration may not be obvious due to oil's high viscosity which can depress the cough reflex.

after completion of rituximab treatment which showed complete response of the lymphoproliferative disorder.

Discussion: The patient underwent liver biopsy for conjugated hyperbilirubinemia which showed polymorphic LPD. LPDs are a group of diseases that are frequently EBV positive and are commonly immunodeficiency-associated. In our patient's case, though he has no history of organ transplant and is not taking any immunosuppressant, age-associated immunosenescence and the comorbidity of rheumatoid arthritis could contribute to an immunodeficiency state which predisposes him to LPD. In patients with conjugated hyperbilirubinemia, infiltrative diseases such as LPD need to remain on the differentials. Liver biopsy should be offered to confirm the diagnosis when lab workups and imaging are inconclusive.

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Coexisting Colitis: A Diagnostic Conundrum

Introduction: Segmental colitis associated with diverticulosis (SCAD) is the inflammation of the interdiverticular mucosa without involvement of the diverticular orifices with unclear pathogenesis. Patients typically present with chronic diarrhea, abdominal pain, primarily in the left lower quadrant, and hematochezia, which are indistinguishable from ulcerative colitis (UC). Although the distribution of colitis helps differentiate SCAD and UC, they may coexist simultaneously. Flexible sigmoidoscopy is critical in determining the driving force to guide treatment. Here we present a case of UC and SCAD.

Case Presentation: A 61-year-old male with UC previously well-controlled with sulfasalazine presented with abdominal pain, bloody diarrhea, and tenesmus. He completed a 10-day course of prednisone taper. However, symptoms persisted. He initiated the second course of prednisone and presented to hospital 6 days later due to worsening symptoms. Computed tomography (CT) on admission showed colonic diverticulosis, diffuse pancolonic wall thickening, most prominently involving the sigmoid colon, pericolonic stranding involving the entirety of the sigmoid colon, and multiple gas and fluid collections along the sigmoid margins, with the largest measuring 3.7 x 3.4 x 3.1 cm, concerning for colitis with contained perforations. The largest fluid collection was drained via CT-guided aspiration. Culture grew *Streptococcus anginosus*, Gram-positive and negative bacilli, and *Candida albicans*, treated with piperacillin/tazobactam and fluconazole. Methylprednisolone was started on top of sulfasalazine to treat presumed ulcerative colitis flare. He completed a 3-day course of methylprednisolone 60 mg daily. C-reactive protein (CRP) decreased by less than 50% from 171.4 to 136.6, suggesting an inadequate response to steroids. Abdominal pain worsened on hospital day 4 following initial improvement. Repeat CT showed non-drainable additional abscesses, treated conservatively with continued antibiotics and bowel rest. We proceeded with flexible sigmoidoscopy, which noted only mild colitis in rectum and more obvious inflammation around the abscesses, suggesting SCAD complicated by perforation with abscess is more likely to be the driving force than UC flare. Treatment for UC was de-escalated to home sulfasalazine, and steroid was discontinued. Symptoms improved with continued antibiotics, the first-line treatment for SCAD, and the patient was discharged in 2 weeks. Due to sinograms showing persistent fistulous communication between the bowel and the original abscess, although downsizing, partial colectomy was planned after the infection and inflammation got better controlled.

