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CALCIPHYLAXIS PRESENTING AS DIGITAL ISCHEMIA IN A PATIENT WITH END STAGE KIDNEY DISEASE ON PERITONEAL DIALYSIS. Abbas H, MBBS. The University of Maryland School of Medicine and VA medical center, Baltimore, MD.

Calciphylaxis, also known as calcific uremic arteriolopathy (CUA), is a fatal condition that mostly affects end stage renal disease (ESRD) patients and is characterized by vascular calcification and vessel thrombosis leading to skin ulceration and tissue necrosis. Few reported cases of CUA presenting with digital ischemia have been reported. Most reports describe CUA in patients on hemodialysis (HD). In recent years the incidence has been increasing among patients on peritoneal dialysis (PD). The exact mechanism or risk factors are not well described.

A 34-year old woman with a history of ESRD secondary to diabetic nephropathy on PD presented with bilateral finger pain, swelling, and numbness for three weeks preceded by dark discoloration. Physical examination showed right middle finger periungual dark discoloration, eschar on the left ring finger distal interphalangeal joint and swelling with skin sloughing of left index, middle and ring fingers. Splinter hemorrhage was also noted on the left middle finger. Bilateral lower extremities showed multiple palpable hyperpigmented macules on the lateral surface. Radial and ulnar pulses were absent with positive Doppler on the right hand and diminished with positive doppler on the left hand.

Laboratory evaluation revealed phosphorus of 9.9 mg/dL and parathyroid hormone level of 330 pg/mL. Erythrocyte sedimentation rate of 134 mm/h and C-reactive protein of 4.7 mg. Antinuclear antibody (ANA) positive with a titer of 1:320. Upper extremity arteriogram showed right distal ulnar and radial artery disease with patent arch and left patent ulnar artery, occluded radial artery and steal syndrome. Right leg lesion biopsy revealed calcification of the intima, involving medium sized and smaller vessels. The dermis showed fibrosis, reactive stromal fibroblasts, and early fat necrosis. Based on pathology results she was diagnosed with CUA and was started on sodium thiosulfate, cinacalcet, and sevelamer. Pain control and aggressive wound care were ensured to avoid complications.

CUA is a rare condition mostly affecting patients on HD with increasingly reported cases among patient on PD. It should be considered in patients with skin ulceration and necrosis. Digital ischemia is a rare presentation and needs a high index of suspicion.
A SURPRISING CASE OF METASTATIC MELANOMA
Lauren Berninger DO, Blessie Nelson MBBS, Rahul Chaudhary MD

Introduction: Malignant Melanoma is a devastating diagnosis accounting for 75% of all skin cancer related deaths. Although melanoma has been classically perceived as a disease of fair-skinned individuals, the disease is certainly not limited to this demographic. While the incidence of melanoma is much lower among African Americans than Caucasians, the disease is associated with worse prognosis and increased mortality in the African American population. Here we present a case of metastatic melanoma in a middle aged African American man presenting as a fungating chest wall mass.

Case presentation: Mr. M, a 53-year-old African American man with no past medical history, presented to the emergency department with left sided chest wall pain and an enlarging chest wall mass. Eight months prior, the patient noticed a birthmark on his left chest wall which became ashy and started to flake. Five months prior he noticed development of a mass. He deferred medical care due to his uninsured status and heroin and cocaine addiction. One week prior to admission, he sought care but was unable to afford the workup. He reported a 44 lb weight loss over a period of four months accompanied by worsening fatigue and generalized weakness. Review of systems was unremarkable. Family history was notable for breast cancer in his sister and maternal grandmother and ‘bone cancer’ in his maternal grandfather. He was an active smoker with a 15 pack year smoking history and intranasal cocaine and heroin use. Physical exam of the left chest revealed two large cohesive fungating masses with cobblestone appearance and visible areas of necrosis and purulent drainage. Biopsy of the left chest wall mass revealed malignant melanoma positive for S100, HMB45 and MART1a. BRAF mutations and PD-L1 were negative. It was unclear if the tumor represented primary malignancy or distant metastasis. Chest CT revealed widespread metastatic disease throughout both lungs as well as extensive left axillary adenopathy. Mr. M underwent multiple trials of immunotherapy in addition to radiation to the left chest and axillary lymph nodes. Despite his initial response to treatment, he developed brain metastasis, cerebral edema and peritoneal carcinomatosis within seven months. Subsequently, he was initiated on palliative chemotherapy and whole brain radiation.

Discussion: This case highlights an unusual presentation of metastatic melanoma in an African American man. It illustrates the aggressive nature of the disease in the non-white population as well as the importance of early diagnosis and treatment. Additionally, while advances in immunotherapy and targeted therapy have proven promising, their use is limited in patients whose disease lacks specific targets.
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GRANULOMATOSIS WITH POLYANGIITIS—MORE THAN MEETS THE EYE
Samantha N Fox, MD; Fahad Qazi, MD; Adrien Janvier, MD; Medstar Health Internal Medicine, Baltimore, Maryland

Granulomatosis with polyangiitis (GPA) is a rare, systemic autoimmune disorder affecting 3 out of every 100,000 persons. The cause of GPA remains unknown and its manifestations are protean affecting the eye, nose, lung, kidney, and skin among other systems. Diagnosis remains a challenge. Not all patients have the nasal symptoms described in the classical presentation of GPA and the finding of scleritis in our patient was the first red flag.

A 62-year-old Caucasian woman presented to her primary care physician with a sore throat, nonproductive cough, rhinorrhea and dyspnea on exertion, where she was diagnosed with a viral respiratory tract infection. Later, she developed redness and a foreign body sensation in both eyes. Scleritis was diagnosed and she was prescribed steroid eye drops, which markedly improved her symptoms. About three weeks after her initial presentation, her symptoms evolved to include night sweats, fever (105°F), episodic hemoptysis, and pleuritic chest pain, prompting her to seek care at the hospital. The patient is a former smoker and her family history included small cell lung cancer and sarcoidosis; therefore, these were included in the differential diagnosis prior to testing. She had a CT scan of the chest revealing multiple bilateral peripheral lung nodules. A biopsy of the nodules revealed necrotizing granulomas. Her urinalysis was notable for hematuria with dysmorphic RBCs and mild proteinuria (est. 700mg/day). Her c-ANCA was positive (1:80) with an antiproteinase-3 IgG level of 714 (reference range 0-19) and the diagnosis of GPA was made. Our patient was discharged on systemic corticosteroids with plans to initiate Rituximab as an outpatient.

The American College of Rheumatology is considering new criteria for diagnosis of GPA in which a positive cANCA/PR3 ab (as in our patient) per se can be diagnostic of GPA (>98% specific). Scleritis, hematuria, lung nodules, and a biopsy with granulomas solidify the diagnosis.

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ABSTRACT FORM: Must be at least 10-point font. A sharp typeface will help reproduction. Be sure to single-space and STAY WITHIN THE BORDERS!
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COMBINED SPONTANEOUS BACTERIAL PERITONITIS AND EMPYEMA IN A CIRRHOTIC PATIENT
Maria Rivera, MD; Nooshin Mirkheshti, MD; Nargiz Miganlinskaya, MD
Medstar Health Internal Medicine, Baltimore, MD

Fluid accumulation in the form of ascites, and/or hepatic hydrothorax, is one of the most frequent complications of cirrhosis and its presence carries poor prognosis with mortality rate as high as 50% over the next 2-3 years. Hepatic hydrothorax is defined as presence of pleural effusion in cirrhosis in which other causes of pleural effusion have been excluded. Spontaneous infections of the ascitic and pleural fluid can occur, termed spontaneous bacterial peritonitis (SBP) and spontaneous bacterial empyema (SBE), respectively.

A 62 year-old man with decompensated alcoholic cirrhosis presented to the ED for dyspnea and abdominal distention. He was treated with thoracentesis and paracentesis. No fluid analysis was sent at that time. He was sent home and returned 3 days later for persistent dyspnea and multiple episodes of non-bloody, non-bilious emesis. Exam and imaging findings were consistent with ascites and recurrence of left pleural effusion. He was admitted for sepsis with colitis as a suspected source and was started on intravenous ciprofloxacin and metronidazole. MELD Na on admission was 33 points. Echo showed ejection fraction of 60-65%. He underwent repeat paracentesis with 6 liters of fluid removed and thoracentesis with 1.4 liters of sero-sanguineous fluid drained. Ascitic fluid studies showed white blood cell count of 3,300 with 70% neutrophils. Pleural fluid studies showed white blood cell count of 23,000 with 83% neutrophils, pH 7.44, LDH 266, albumin gradient 1.5, and negative adenosine deaminase. Blood and fluid cultures showed no growth. He was diagnosed with combined SBP and SBE. Antibiotics were changed to Zosyn for 10 day course. Subsequent ascitic and pleural fluid analysis after antibiotic therapy showed resolution of infection. Hepatic hydrothorax occurs in approximately 5 to 10% of patient with cirrhosis and is thought to result from passage of ascites from the peritoneal cavity into the pleural cavity through small diaphragmatic defects. It develops more often on the right (73%) than left side (17%) given that the left hemidiaphragm is thicker and more muscular, but can occur bilaterally in about 10% of patients. SBE is associated with few localizing signs, and therefore a high index of suspicion is required for diagnosis. Our case demonstrates that SBE is often underdiagnosed and should be considered so that patients are appropriately treated without delay.

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Idiopathic Facial Swelling: A Mouth Watering Case
Anthony Bowen, MD PhD; Alan Baer MD; Gail Berkenblit, MD PhD
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A 52-year-old woman with a past medical history notable for asthma, COPD, treated syphilis, and opiate use disorder presented to the Johns Hopkins Outpatient Center for evaluation of recurrent episodes of painful facial swelling.

She reported that for the eight months prior to presentation, she had recurrent episodes, about three times weekly, of this facial swelling. She often initially noticed burning in the tongue followed by tenderness and swelling below her jaw on either one or both sides of her face. The episodes began spontaneously and then self-resolved after about four hours. She had seen multiple providers about these symptoms during the preceding months, but unfortunately was never able to be evaluated during an episode.

On the day of presentation, she was noted to have palpable 3x2cm submandibular masses bilaterally, which were mobile, firm, lobular, and tender. She had no surrounding lymphadenopathy. A similar lobular mass was felt in the area of the right parotid gland. Her laboratory studies were notable for a persistently elevated absolute eosinophil count and an elevated serum IgE. A minor salivary gland biopsy showed no lymphocytic infiltration. Subsequently, she underwent massage of the submandibular glands with expression of saliva and mucus strands. Analysis showed numerous eosinophils in clusters.

Salivary gland enlargement can due to viral or bacterial infection, sialolithiasis, or autoimmune disorders such as Sjögren’s syndrome and IgG4-related disease. Eosinophilic sialodochitis is a recently redefined clinical entity describing patients with recurrent salivary gland swelling and mucus plugging. In most cases, mucus plugs are rich with eosinophils. A recent review suggests that many patients have a history other atopic conditions. Treatment modalities range from antihistamines or glucocorticoids to more invasive procedures including ductal dilatation or gland resection. The association of this condition with atopy and eosinophilia, there is promise that biologic therapies including IL5 antagonists may offer an effective treatment option.

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DEFERASIROX- A RARER CAUSE OF FANCONI SYNDROME

Iman Sajid Khan M.D., Mustafa Noor Muhammad M.D., Janki Patel M.D.

INTRODUCTION: Deferasirox is a recently approved iron chelator and is widely used to treat iron overload in transfusion dependent patients. Although nephrotoxic side effects of deferasirox are common and include increased serum creatinine, its effect on proximal tubule has not been studied in detail.

CASE DESCRIPTION: A 20 year old male presents with fever, chills, nausea, vomiting and diarrhea of 2 weeks’ duration. His past medical history is significant for relapsing and remitting pure red cell aplasia of unknown etiology requiring frequent blood transfusions, on chronic high-dose Deferasirox therapy for iron overload. He had a low BMI and was febrile and dehydrated; on physical exam, abdomen was soft and non-tender with normal bowel sounds. Laboratory findings included leukocytosis, hypokalemia, hypophosphatemia, transaminities and elevated creatinine with euglycemia. Urinalysis revealed proteinuria and glycosuria. Computed tomography of the abdomen was normal.

Antibiotics and intravenous hydration were started. His incidental laboratory findings prompted us to check his urine amino acid levels that were found to be elevated. Since he had no family history of glycogen storage disorders or cystinosis and was on no other medications that could have caused Fanconi syndrome, it was surmised that his Deferasirox was the likely cause. Over the course of the next few days, the patient’s condition improved and he was successfully discharged home with recommendations to discontinue Deferasirox.

DISCUSSION/ CONCLUSION: Commonly used tests to assess renal function such as estimated glomerular filtration rate and serum creatinine are unable to diagnose Fanconi syndrome. Hence, we propose the routine testing of serum electrolytes and urine analysis to facilitate the early diagnosis of Fanconi syndrome in the context of high doses of deferasirox therapy.
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LADY WINDERMERE SYNDROME PRESENTING AS HYPERCALCEMIA

The patient is a 70 year old woman who was in her usual state of health until she developed a productive cough with white sputum. She had no smoking history or history of lung disease. Approximately one month later, she began to experience fevers, generalized weakness, confusion and visual hallucinations. She was admitted to an outside hospital where she was found to have a calcium level of 14.5 mg/dL requiring treatment with intravenous fluids, calcitriol, and zoledronate. Her labs were also notable for a white count of 8.4 K/uL with a normal differential, PTH of <1.0 pg/mL (reference 14-64 pg/mL), PTHrp of 21 pg/mL (reference 14-27 pg/mL), alkaline phosphatase of 54 IU/L (reference 24-118 IU/L), 25-hydroxyvitamin D of 32 ng/mL (reference 30-100 ng/mL), 1,25-dihydroxyvitamin D of 203 ng/mL (reference 18-72 ng/mL), SPECT with a small M-spine and normal kappa/lambda ratio. CT imaging demonstrated consolidative and ground glass opacities in the right middle lobe and lingula. She was treated with antibiotics for a presumptive multifocal pneumonia and discharged with plan for follow up in the outpatient setting; however, the patient was readmitted on two additional occasions for confusion and low grade fevers, and she was again treated for symptomatic hypercalcemia as well as presumptive bacterial infection. She was then transferred to Johns Hopkins Hospital (JHH) for further management. Repeat CT imaging of her chest at JHH demonstrated multifocal consolidative opacities in the bilateral lungs as well as multiple pulmonary nodules that were increased in size when compared with prior imaging. A broad infectious workup was obtained and the patient underwent bronchoscopy with bronchoalveolar lavage. Sputum cultures grew mycobacterium avium intracellulare complex (MAC) and the patient was diagnosed with Lady Windermere Syndrome. She was treated with azithromycin, ethambutol and rifampin for a period of 12 months with clearance of her mycobacterial cultures and complete resolution of her cough. Additionally, there was normalization of her lung imaging and no recurrence of hypercalcemia.

This case exemplifies a rare cause of hypercalcemia, illustrates the indolent nature of mycobacterium avium complex respiratory infections leading to delay in diagnosis, and brings awareness to an increasingly common respiratory pathogen that can affect hosts with no evident predisposing conditions.

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A CASE OF ISOLATED METHYLMALONIC ACIDEMIA
Shivani Singh Chaudhary, MD; Valentina Baez Sosa, MD; Ramez Jabaji, MD
MedStar Harbor Hospital, Baltimore, MD

Background
Isolated methylmalonic acidemia (MMA) is an inborn error of branched-chain amino acid metabolism caused by a deficiency of several possible enzymes but largely attributed to methylmalonyl-CoA mutase deficiency. The resulting accumulation of toxic organic acids disrupts metabolic pathways, causing significant disability and mortality from birth to adulthood.

Case Description
An 18-year-old man presented to the emergency department from a primary care clinic with elevated BUN (53 mg/dL), creatinine (2.9 mg/dL) and hyperkalemia (6.9 mmol/L). Medical history was significant for mut-subtype B12-responsive MMA complicated by high-output chronic renal insufficiency (baseline creatinine of 1.5-1.7 mg/dL) with secondary hypertension, electrolyte derangements, and bilateral optic atrophy. He relied on enteral tube feeds for the majority of his nutritional and fluid requirements. He had multiple previous hospital admissions for similar presentations. The patient was admitted for dehydration with electrolyte derangements and resuscitated with appropriate fluids. In the month to come, the patient underwent cadaveric simultaneous liver and kidney (SLK) transplant for more definitive treatment of MMA, which was complicated by early acute rejection that responded well to high dose steroids.

Discussion
Methylmalonic acidemia is a rare metabolic disorder with numerous acute and chronic life-threatening complications. Although it is more likely to be found in a pediatric population, it is indeed possible to encounter older patients who repeatedly present with methylmalonic aciduria, increased anion gap metabolic acidosis, ketosis/ketonuria, elevated lactate, thrombocytopenia, and progressive renal tubular disease. Definite treatment can be achieved with SLK transplant.

Conclusion
MMA should be considered in patients repeatedly presenting with otherwise unexplained anion gap metabolic acidosis.

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ESOPHAGEAL INTRAMURAL PSUEDODIVERTICULOSIS, A RARE CAUSE OF RECURRENT DYSPHAGIA
Gavneet Sandhu, MD
Medstar Health Internal Medicine, Baltimore MD

Esophageal intramural pseudodiverticulosis (EIPD) is a rare benign disease characterized by multiple small flask shaped outpouchings in the esophageal wall. It predominantly presents with symptoms of dysphagia, accompanied by esophageal strictures. It is diagnosed via EGD, but poses both diagnostic and therapeutic challenge as exact etiology remains unknown. This is a case of recurrent dysphagia requiring EGD evaluation revealing EIPD.

A 64-year-old man presented with complaints of dysphagia after eating cheesesteak. He reported a sensation of food stuck in his esophagus and not being able to swallow any liquids or solids. He occasionally had similar episodes over past 12 years, some resolving spontaneously while others required intervention. He denied pain, fevers, chills, dyspnea, nausea, vomiting, or diaphoresis. His history was significant for alcohol use (>10 years ago), acid reflux, and recurrent esophageal strictures requiring multiple dilations since 2015. His last esophageal dilation was in 2017, which required use of a pediatric scope to pass through a small esophageal stricture of 8 mm. His physical exam showed no abnormality and lab results were within normal limits. Neck X-ray revealed 3.1 x 0.7 cm density in the proximal esophagus extending cranially to just below the epiglottis. Patient underwent EGD which revealed food at lower third of esophagus, with evidence of reflux esophagitis and multiple EIPD along middle and lower third of esophagus. Patient improved after removal of food and was able to swallow solids and liquids. He was advised to use PPI daily for 3 months. Pathology results from middle esophagus revealed squamous cell epithelium with chronic and acute inflammation, without evidence of fungus or helicobacter on stain. In retrospect, images from previous EGDs revealed that EIPD was present.

This case illustrates the diagnostic and therapeutic challenge posed by EIPD. The small outpouchings are few mm in size and can often go unrecognized on EGD. Etiology of EIPD remains unknown; however, it has been shown to be associated with diseases such as diabetes mellitus, esophageal candidiasis, gastroesophageal reflux disease, and chronic alcoholism. Treating underlying diseases may help with symptomatic relief but repeated endoscopic evaluation and dilation may be necessary.

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A CASE OF HEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS ASSOCIATED WITH ACUTE MYELOID LEUKEMIA. Ajaka L. MD, Patel S. MD. The University of Maryland School of Medicine and VA Medical Center, Baltimore, MD.

Hemophagocytic Lymphohistiocytosis (HLH) is a rare and life-threatening syndrome of excessive immune activation. The mechanism is likely driven by impaired functioning of natural killer (NK) cells and cytotoxic T-lymphocytes, which leads to excessive macrophage activation and subsequent cytokine release. This results in the unregulated engulfment of host blood cells and widespread cell damage causing febrile illness with multiorgan dysfunction. It can occur in familial or sporadic cases or can be triggered by infection or malignancy. In adults, malignancy associated HLH is usually seen in B-cell or T/NK-cell lymphomas. The following is a case of malignancy associated HLH in which the preceding malignancy is acute myeloid leukemia (AML).

A 69 year old male with past medical history of hypertension and radiation treated Hodgkin’s lymphoma was diagnosed with AML. His AML was diagnosed approximately ten years after his Hodgkin’s lymphoma treatment. He was admitted to our institution and received induction therapy with cytarabine and idarubicin. One month after documented remission, he was admitted for thrombocytopenia and anemia. Physical exam was notable for fever to 39.5°C, splenomegaly and altered mental status. CBC showed WBC 2.8 K/mcL, hemoglobin and hematocrit 6.7 g/dL and 19.9%, and platelets 9 K/mcL. His ferritin was 12,497 μg/mL. Triglycerides were 367 mg/dL. Epstein-barr virus and cytomegalovirus serologies were negative. On presentation, patient met five out of eight HLH criteria: 1) fever, 2) splenomegaly, 3) cytopenia, 4) hypertriglyceridemia, and 5) elevated ferritin. A bone marrow biopsy (BM) was consistent with HLH. He was treated with HLH 1994 protocol with remission. Hospitalization was complicated by intracranial hemorrhage, Klebsiella oxytoca, and Clostridium perfringens bacteremia. Two months later, when he developed thrombocytopenia, he was diagnosed with HLH again, and treated with the 1994 protocol, but with a higher dose dexamethasone. Approximately one year later, he developed increasing fatigue and pancytopenia. BM biopsy was consistent with relapsed AML.

Malignancy associated HLH has higher mortality rates compared with other forms of HLH. Without cure of the malignancy, there is a concurrent increased risk for HLH. Allogeneic hematopoietic stem cell transplant (HCT) is curative of HLH associated hematopoietic malignancies (in this case AML). However, HCT is associated with high risks of graft-versus-host disease, infection, and death, which limit its use in older patient populations.
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MYXEDEMA COMA IN THE SETTING OF METHIMAZOLE USE IN A PATIENT WITH GRAVE'S DISEASE
Chikara Gohongh, MD-MBA, Asha Thomas, MD FACP, FACE
Sinai Hospital of Baltimore Program in Internal Medicine

Introduction:
Myxedema Coma usually occurs in individuals with long-standing hypothyroidism precipitated by an inciting event. It is in this context that we present a case of myxedema coma in a patient with known hyperthyroidism on antithyroid medications subsequently resulting in severe hypothyroidism.

Case Presentation:
A 66 year old woman with a history of non-ischemic cardiomyopathy and OSA/OHS developed hyperthyroid symptoms and was diagnosed with Grave’s disease. She was started on methimazole 30mg (TSI 1.72, nL<1.30) however was lost to follow up. After a couple of months, she was then seen at the outpatient Endocrinology office where she was notably fatigued, had deepening of her voice, lower extremity edema, skin changes, and an elevated TSH at 158 μIU/mL and depressed FT4 at 0.19 ng/dL. Methimazole was discontinued and she was admitted to the hospital. Physical examination revealed marked somnolence and bradycardia. She was given a loading dose of levothyroxine 100mg IV and started on daily IV levothyroxine and stress dose steroids.

Unfortunately, her mental status deteriorated and was found to have acute hypercapnic respiratory failure subsequently requiring intubation and mechanical ventilation. Her hospital course was complicated by her tenuous respiratory status given her hypoventilation from severe hypothyroidism, presumed OHS from her obesity, and severe pulmonary hypertension from her pre-existing cardiomyopathy. She was successfully extubated however required both intermittent daytime and nighttime BIPAP due to persistent hypercapnia. Once her TSH and FT4 normalized, levothyroxine was discontinued and she was monitored for possible recurrence of her hyperthyroidism given her elevated TSI.

Concurrently, she was weaned to supplemental oxygen during the day and BIPAP at night and was subsequently discharged home with close follow-up.

Discussion:
Myxedema Coma is an endocrine emergency that presents with a constellation of symptoms that require prompt recognition and treatment given its high risk of mortality. It is prudent that individuals on antithyroid medications be monitored closely given that it can result in overt hypothyroidism. It is important to recognize that symptoms such as bradycardia, hypoventilation and changes in mental status are almost always multifactorial and optimal treatment includes awareness of such.

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ABSTRACT FORM: Must be at least 10-point font. A sharp typeface will help reproduction. Be sure to single-space and STAY WITHIN THE BORDERS!
STRESS MYOCARDIAL PERFUSION IMAGING (MPI) IN WOMEN
Mohammad Ahmad Safdar Ali, MBBS
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A 32-year-old African-American woman with no significant personal or family cardiac history and no risk factors for cardiac disease, presented to our hospital after experiencing palpitations and chest pain. She was driving her car when she experienced a rapid heartbeat which lasted approximately 5-7 minutes. After the palpitations resolved, she experienced a sharp sensation behind her left breast which lasted 5-10 seconds. Initial troponin was negative, a follow-up troponin was 0.48 and EKG showed T-wave inversions in the anterolateral and inferior leads which resolved subsequently. She underwent an exercise stress test which showed 1 mm horizontal ST depression. This was followed with nuclear perfusion scan (SPECT) which was normal. Due to continued suspicion for cardiac etiology, she was referred for cardiac catheterization and was found to have proximal 95% stenosis of the large size circumflex vessel which was stented. She was discharged home on dual antiplatelet therapy.

A growing body of evidence supports the diagnostic value of stress myocardial perfusion imaging in the detection of CAD in women. Data has shown that stress myocardial perfusion imaging consistently has a significantly higher diagnostic accuracy than exercise testing alone. It is well appreciated that the diagnostic accuracy in women is adversely affected by gender specific factors such as breast attenuation, small left ventricular chamber size, and a high prevalence of single vessel CAD. A study using thallium-201 imaging demonstrated a lower sensitivity for single vessel disease in women than men. This lower sensitivity for single vessel disease in women may be related to a generally small chamber size in female patients than in males. One study using Tc-99m sestamibi and pharmacologic stress has demonstrated a high sensitivity but a moderate specificity. The reduced specificity may be related to soft tissue attenuation from breast. There is also discussion regarding thallium vs Tc99 regarding sensitivity and specificity in women compared to men. Most recommendations for MPI is for women with known CAD or intermediate risk with relevant symptoms. This case is important lesson for the clinician to pursue their clinical instincts. This was a low risk patient with a Heart Score of 2 to 3 with normal MPI and was worked up based on ancillary testing being exercise EKG, and troponin elevation.

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<th>Stress Myocardial Perfusion Imaging (MPI) in Women</th>
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SYNTHETIC MARIJUANA-ASSOCIATED LIFE-THREATENING COAGULOPATHY
Usman Sagheer MD, Rishti Shrestha MD, Rehan M Farooqi MD
Medstar Health Internal Medicine, Baltimore, MD

Synthetic marijuana (SM) is a dangerous class of drugs with unknown composition and side effects that can lead to unpredictable health consequences and limited detectability. Brodifacoum-contaminated SM use has recently increased. It is a highly potent, long-acting Vitamin K antagonist used as a rodenticide associated with life-threatening coagulopathy.

A 50-year-old man with no past medical history presented with right-sided flank pain and hematuria. He endorsed using "K2/spice" synthetic marijuana. He denied use of over-the-counter medication or herbal supplements and had no history of coagulopathy or liver disease. On admission, he was hemodynamically stable with noted right-sided costovertebral tenderness. Relevant serology revealed INR > 12.5, PT > 100 seconds, PTT 146 seconds, and hemoglobin 13.8 mg/dL. Urine analysis revealed moderate blood and more than 182 RBCs/HPF. Urine toxicology screen was negative for cannabis. CT of the abdomen and pelvis showed right perinephric fluid with enhancing endometriosis of renal pelvis, likely a sequela of infection or recently passed stone. With recent synthetic marijuana use and significant coagulopathy, there was a concern for contaminated synthetic marijuana. An anti-coagulant poisoning panel revealed brodifacoum use. He was treated with fresh frozen plasma and high doses (starting 50mg three times a day) of vitamin K. The patient’s INR improved to 2.7 and he was continued on vitamin K 10 mg daily at discharge, with an outpatient cystoscopy for hematuria planned.

The recent increase in the incidence of SM contamination leading to life threatening coagulopathy has raised serious public health concerns. Littile is known about the composition of SM, but coagulopathy is attributed to contamination with brodifacoum. The half-life is extremely long, about 20 days, due to minimal metabolism and limited clearance. An anticoagulant poisoning panel is necessary to confirm the diagnosis. Treatment includes FFP or prothrombin complex concentrate with high doses of vitamin K. Clinicians should have a high index of suspicion for brodifacoum poisoning with unexplained new onset coagulopathy in patients with history or suspicion of using SM.

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ABSTRACT FORM: Must be at least 10-point font. A sharp typeface will help reproduction. Be sure to single-space and STAY WITHIN THE BORDERS!
SPONDYLODORSITIS WITH CERVICAL EPIDURAL ABSCESS CAUSED BY E. FAECALIS
Matthew Sette, MD; Herbert Neil Friedman, MD
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There are a few cases of Enterococcal spondylodiscitis reported to date that have been observed mostly in patients with infective endocarditis. Other major risk factors include degenerative spine disease, prior spinal surgery, DM, and immunocompromised state. We report a case of enterococcal bacteraemia and subsequent spondylodiscitis with cervical involvement that required surgical intervention in an elderly patient with severe degenerative spinal disease but no other risk factors.

An 89-year-old man with chronic back pain with severe spinal stenosis presented with worsening constipation for 5 weeks and difficulty ambulating. He was recently discharged following hospitalization for a mechanical fall. MRI done on that admission showed severe spinal stenosis with significant DDD of lumbar spinal. In the ED, initial vital signs were stable. Physical exam showed no restriction in range of motion or focal neurological deficit. Blood work was significant for Na+ 120 and Hb 11.3. CXR showed RLL infiltrates for which patient was started on vancomycin. Blood cultures grew Enterococcus Faecalis in 4/4 bottles. Antibiotics were switched to ampicillin and ceftriaxone. Echocardiogram showed no vegetations. CT abdomen/pelvis showed sigmoid diverticulosis without diverticulitis. The second set of blood cultures remained positive. His back pain did not improve, and he started to complain of new-onset cervical pain. Repeat MRI of the lumbar spine showed new emerging discitis and osteomyelitis at L4-5. MRI of the cervical spine showed early discitis/osteomyelitis with ventral epidural phlegmon. He underwent urgent anterior cervical disectomy, removal of epidural abscess with spinal cord decompression. He tolerated the surgery well. The third set of blood cultures were negative. He was subsequently discharged on 6-8 weeks of IV antibiotics. Repeat lumbar MRI showed no residual disease and repeat cervical MRI showed a favorable picture with no new epidural collection or paravertebral collection.

Hematogenous enterococcal vertebral osteomyelitis has been rarely reported. Long term antibiotics is usually the only treatment, but surgical options should be considered in the case of epidural abscess to prevent neurological deficits. A high index of clinical suspicion and MRI should be considered in all patients with enterococcal bacteraemia with back pain.
2019 Mulholland Mohler Resident Meeting

ATRIAL MYXOMA PRESENTING WITH DIFFUSE ARTERIAL THROMBOSIS
Rachel Mittelstaedt, Department of Medicine, Johns Hopkins Hospital, Baltimore MD

A 29-year-old woman with past medical history of prior ectopic pregnancy presented to an outside hospital with twelve hours of severe abdominal, lower back, and bilateral leg pain. She developed these symptoms abruptly upon standing from a sitting position. She endorsed ethanol use, but denied illicit drug use. On initial exam, she had right-sided lower extremity pulses by Doppler, but no identifiable pulses of the left lower extremity. A CT abdomen/pelvis with contrast demonstrated bilateral renal and splenic infarcts, as well as widely patent lower extremity vasculature. She was subsequently transferred to Johns Hopkins Hospital for further management. On arrival to JHH, vitals were unremarkable and labs were notable for WBC 17. EKG showed normal sinus rhythm. Blood cultures and an antiphospholipid antibody syndrome (APLS) workup were sent. Lower extremity ultrasound revealed a 5 cm partially occlusive thrombus of the left common femoral artery, and she was started on systemic anticoagulation. Repeat CT chest/abdomen/pelvis re-demonstrated renal and splenic infarcts. In addition, there were also occlusive thrombi of the left common femoral artery and right deep femoral artery, as well as a non-occlusive thrombus of the left atrium measuring up to 2.1 cm. Transthoracic echocardiogram showed a 2 x 2 cm echogenic mass attached to the atrial septum, consistent with atrial myxoma. Shortly thereafter, two of two peripheral blood cultures resulted positive for Corynebacterium. The patient was started on vancomycin. After confirmatory transesophageal echo, she went to the OR for surgical excision of the left atrial mass and bilateral lower extremity thrombectomy. Her APLS workup was negative. Tissue biopsy of the left atrial mass confirmed atrial myxoma. Pathology of the bilateral lower extremity thrombi showed atrial myxoma and organized clot.

Primary cardiac tumors are quite rare, and thus pose a diagnostic challenge. Clinical symptoms include arterial embolization, as well as signs and symptoms of congestive heart failure and mitral valve disease. This case was unique given the presenting symptom of diffuse embolization without other cardiac symptoms, as well as apparent superinfection with Corynebacterium. However, it highlights that primary cardiac tumors should be considered as a rare cause of diffuse arterial thrombosis, particularly in patients with acute symptoms and no personal history of rheumatologic disease.

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DISSEMINATED CRYPTOCOCCAL INFECTION IN PATIENT WITH IgG DEFICIENCY

INTRODUCTION: Disseminated cryptococcal infection is known to be associated with cell mediated immunodeficiency. However, here we discuss a rare case of disseminated cryptococcal infection in a patient with humoral deficiency (IgG deficiency).

CASE REPORT: A 67-year-old woman with history of IgG deficiency was admitted to the hospital with suspected community acquired pneumonia. In addition, patient was noted to have multiple, pruritic skin lesions, involving the chest, abdomen and bilateral upper extremities. The rash progressively worsened despite being started on oral fluconazole by her primary care physician (due to concern for cutaneous fungal infection). On exam: the patient had multiple, well-circumscribed, ulcerated papulonodular lesions with central crusting. Laboratory data included: WBC 15,800 cells/microliter (neutrophils 73%, lymphocyte 7%, monocytes 8%, and bands 12%), hemoglobin 6.9 gm/dl, platelets 502,000 cells/microliter, low total IgG 500 mg/dl with IgG subclasses 1, 2 and 3 deficiencies, and HIV negative. CSF India ink stain was negative. Cryptococcal serum antigen was positive at a titer of 1:8. Skin biopsy was inconclusive. The patient’s clinical picture was most consistent with disseminated cryptococcal infection due to her positive cryptococcal antigen levels which have sensitivity and specificity >90%. Given the disseminated nature of the infection and the patient’s ongoing pneumonia, cryptococcal pneumonia was also considered. Patient was started on liposomal amphotericin and fluconazole. She developed acute kidney injury and was changed to induction therapy with high dose oral fluconazole. With this treatment, patient’s skin lesions improved, her pneumonia started to resolve and follow up cryptococcal antigen was negative.

DISCUSSION: Disseminated cryptococcosis is a well described pathogen in patients with disorders of cell mediated immunity. It is uncommon in patients with humoral deficiency. In our case, the patient had underlying IgG deficiency and was found to have disseminated cryptococcal infection with good clinical response to treatment.

CONCLUSION: In cases of disseminated cryptococcal infection, antibody mediated immunity deficiencies should be investigated in addition to cell mediated immunity deficiencies.

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Loperamide for Opioid withdrawal
Eunice Dugan, Resident, Department of Medicine, Johns Hopkins, Baltimore MD.

Loperamide is an over-the-counter medication effective for symptomatic management of diarrhea. With the growing opioid epidemic, loperamide has been used to mitigate opioid withdrawal symptoms. A 25-year-old woman was brought in by EMS for a witnessed syncopal event after one day of drowsiness. There was no seizure activity or incontinence. Upon arrival, she was hypotensive to 70s/40s and bradycardic to the 30s. She was alert and oriented to name, date, place, and circumstance, but drowsy with multiple near-syncpe episodes. ECG showed an irregular wide-complex bradycardia with alternating left and right bundle branch block morphology and severe QTc prolongation to 700 milliseconds. Of note, ECG two years prior was in normal sinus rhythm with normal QTc. Additional history at the time revealed no ingestions or medications except NSAIDs, no new travel, food, or exposure, no family history of sudden cardiac death. She had been prescribed oxycodone in the past for chronic pain, but had not taken it for at least two weeks. She was transferred to the ICU and stabilized on isoproterenol and dopamine. Since toxidrome was on the differential, poison control was contacted. An extended urine toxicology panel including lithium, phenytoin, pregabalin, TCA, bupropion and loperamide were sent. She underwent a trial of urine alkalinization without significant improvement in hemodynamics or ECG pattern. The electrophysiology team was consulted, but invasive studies were deferred given bizarre ECG pattern and strong suspicion for toxidrome. By hospital day three, there was normalization of PR and QRS interval, but QTc remained ~700 milliseconds. Despite multiple failed attempts, by hospital day six, she was weaned off isoproterenol with normal heart rate and blood pressure. As her mental status improved and collateral was obtained, there was suspicion for an undertreated mood disorder. Psychiatry was consulted and confirmed severe depression. With further improvement, she was transferred to psychiatry for voluntary admission where she eventually admitted to opioid abuse and frequent use of loperamide to wean herself. Her QTc was 426 milliseconds on transfer. Weeks later, her loperamide levels resulted as severely elevated. This case demonstrates overdose effects of a commonly used medication. Due to its similarity to opioids, loperamide is more frequently being used to manage withdrawal symptoms and can cause cardiac toxicity by QT prolongation. Identification of a likely toxidrome due to bizarre EKG changes, and early psychiatric care in the setting of possible ingestion was crucial to appropriate patient management.