Clinical Case of the Month

Abstracts From the Louisiana American College of Physicians Associates Meeting

Each year medical students in Louisiana and residents from the eight Internal Medicine training programs in Louisiana are invited to submit abstracts for the annual Louisiana American College of Physicians (ACP) Associates Meeting. The content of these abstracts includes clinical case vignettes or research activities. The abstracts have all identifying features removed (i.e., names, institutional affiliations, etc.) before being sent to physician judges. Each judge scores each abstract independently, and the scores from the judges are averaged and ranked. This year we are excited to be able to publish the 26 most highly ranked abstracts presented at this year's competition. These abstracts (15 oral, 11 poster) were presented at the Associates Meeting held at the Louisiana State University Health Sciences Center in Shreveport on January 21, 2014. We would like to thank the *Journal of the Louisiana State Medical Society* and appreciate its efforts to publicize the hard work of these trainees.

Lee S. Engel, MD, PhD, FACP
Chair, Louisiana Associates Liaison Committee

William Davis, MD, FACP
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A Case of Mixed Pulmonary Infection With Two Non-Tuberculous Mycobacterium Species in a Previously Health Adult Male

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Case: A 41-year-old previously healthy African-American man presented with shortness of breath and productive cough. Chest radiograph and chest CT identified a diffuse nodular infiltrate with a large cavitary lesion and a large pneumothorax in the right hemithorax with additional cavitary lesions in the left upper lobe. A sputum culture was positive for a *Mycobacterium kansasii,* and the patient was subsequently started on isoniazid 300 mg, rifampin 600 mg, and ethambutol 600 mg. The *M. kansasii* susceptibility testing revealed resistance to ciprofloxacin, rifampin, and trimethoprim-sulfamethoxazole. Unfortunately, no follow-up sputum cultures were collected, but the patient reported completing a 15-month course of treatment. Three months later, he presented to the emergency room with chest pain and shortness of breath with a productive cough for two-month duration. Chest radiograph identified bilateral, upper lobe bullous emphysematous changes with probable superimposed atypical infection of the left upper lobe. Blood-tinged sputum was noted on presentation. The cytology and culture of bronchial endoscopy washings revealed Mycobacterium Avium Complex. The azithromycin and moxifloxacin regimen was initiated.

Discussion: Most cases of atypical mycobacteriosis are secondary infections associated with underlying lung disease and immunosuppression secondary to HIV/AIDS or malignancy. In this patient, however, we report an unusual case of pulmonary infection due to *M. kansasii* and M. Avium Complex in an otherwise healthy male without underlying lung disease.

Isolated Small Intestinal Metastatic Disease as a Herald of Recurrent NSCLC

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Introduction: The small bowel is a very rare location of metastatic deposits of non-small cell lung cancer (NSCLC).

Case: A 58-year-old patient with a history of Stage III (T2N2M0) NSCLC treated with chemotherapy and radiation presented to the hospital with one week of shortness of breath and chest discomfort. The patient's NSCLC had been considered to be in virtual remission based on a PET scan following his treatment. At presentation, the patient was found to have a severe microcytic anemia. Initial workup for a source for the patient's blood loss was negative. A review of the patient's medical record suggested a suspicious

finding on a surveillance CT involving the small bowel. The patient underwent CT enterography and was found to have a partially obstructing mass located on the mesenteric side of the small bowel. Laparoscopic exploration of his abdomen was performed with resection of the mass and reanastamosis of the small bowel; no signs of other masses or metastatic deposits were evident. Gross pathology revealed an 8 cm lesion fixed on the mesenteric side of the bowel serosa eroding into the bowel lumen, which was determined to be a poorly differentiated carcinoma invading through both the mucosal and serosal surfaces. Immunostaining of the sample revealed CK-7 and TTF-1 staining characteristics in line with the biopsy from the patient's primary lesion in the lung, and a diagnosis of NSCLC metastatic to the early ileum was made. The patient was considered to have a solitary metastatic event to the small bowel and was discharged with plans to undergo salvage therapy. Several weeks later, the patient returned to the emergency room with nausea, weight loss, melena, and decreased appetite. On CT scanning, he was found to have widespread carcinomatosis with implants throughout his large and small bowel, along with nodules in his liver, adrenal glands, and kidneys.

Discussion: While an extremely rare location for isolated metastasis in patients with NSCLC, metastatic disease to the small bowel may be associated with mild and nonspecific symptoms that may not be immediately recognized as metastatic disease. While these lesions generally portray a very poor prognosis, early and aggressive therapy may improve time to further relapse and quality of life.

A Case of "Normotensive" Pheochormocytoma

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Introduction: Pheochromocytoma is a rare cause of hypertension but is potentially lethal and should be considered in patients with suspected secondary hypertension. Although presence of a pheochromocytoma is less likely in the absence of typical symptoms and findings, atypical presentations do occur, and laboratory and imaging studies become more important for diagnosis.

Case: A 60-year-old male with history of asthma, recent-onset mild hypertension treated with low-dose amlodipine, and no significant family medical history was noted to have an incidental 2 cm left adrenal nodule - hyperintense on T2 MRI images of the lumbar spine - which was obtained for evaluation of back pain. The patient had no symptoms of adrenergic spells except for occasional mild night sweats. Physical exam was unremarkable with blood pressure 136/80 mmHg. Laboratory evaluation disclosed persistently elevated plasma metanephrines, 24-hour urine epinephrine, and urine metanephrines two to four times the upper limit of normal. Serum and 24-hour urine cortisol were within normal limits. A dedicated CT of the adrenals showed a 2.1 cm adrenal nodule with precontrast attenuation of >10 HU and essentially no contrast washout on delayed post-contrast phase, suggestive of pheochromocytoma. The patient underwent left adrenalectomy with removal of a 1.8 x 1 x 1 cm mass. Histopathology was consistent with pheochromocytoma with focal invasion of the periadrenal fat. The patient remained normotensive intraoperatively and post-surgery. All laboratory abnormalities subsequently normalized.

Discussion: Pheochromocytomas usually cause sustained hypertension or adrenergic spells but occasionally present with few symptoms, especially if small.

The Mike Tyson Challenge: An Extreme Case of Rhabdomyolysis

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Introduction: There are many causes of rhabdoymyolysis, including excessive exercise. One of the most serious complications of rhabdoymyolysis remains acute kidney injury (AKI), which is caused by non-protein heme pigment that is released from myoglobin. Furthermore, inflammation of the muscle can compress structures in the same fascial compartment, resulting in compartment syndrome.

Case: A 24-year-old inmate was brought to the emergency department with severe thigh pain and dark-colored urine after participating in "The Mike Tyson Challenge." During this challenge, he performed 372 squats over a 45-minute time interval. The thigh pain began the next morning followed by "Coca-Cola"-colored urine. On physical exam, his thighs were extremely tense, and he underwent emergent bilateral fasciotomy for compartment syndrome. He was found to have a creatinine kinase of 401,880 U/L, BUN of 45 mg/dl, serum creatinine 7.21 mg/dl, and potassium of 6.3 mmol/l. Urinalysis revealed 250 blood/ul but only 3 to 5 red blood cells/HPF. He received insulin, sodium polystyrene sulfonate, IV fluid hydration, and hemodialysis. He slowly improved while receiving three weeks of hemodialysis and physical therapy in the hospital.

Discussion: In his prime, "Iron" Mike Tyson was the self-proclaimed "baddest man on the planet." A workout based on his physical training was developed and named the "Mike Tyson Beast Workout" or "Challenge." Some rules of the "Beast Workout" are as follows: 1) The workout must be performed in no more than one hour; 2) The aim is to perform dead lifts, bench press, squats, chest press, and dumbbell curls throughout the hour. Our patient barely survived the squats. Fortunately, aggressive surgical intervention, fluid hydration, and hemodialysis were able to reverse the damage caused by the release of myoglobin from injured muscle.

Native Valve Legionella Endocarditis as a Cause of Arterial Embolization

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Introduction: Legionella Endocarditis is an extremely rare condition even among patients with prosthetic valves. Even more infrequent in patients who have native valves, only a handful of cases have been reported.

Case: A 43-year-old Caucasian male with no past medical history presented to the emergency department with diffuse abdominal pain. Associated symptoms included 20- to 30-pound weight loss, nausea, constipation fevers, and night sweats. Physical exam was significant for cachexia, acute distress secondary to abdominal pain and tenderness, and hepatosplenomegally. Labs revealed leukocytosis with a left shift, and abdominal and pelvic CT with IV contrast showed infarcts within the spleen and in the lower pole of the right kidney. The differential diagnosis after admission to the hospital included endocarditis and hypercoagulable states secondary to malignancy. The former was confirmed with a Transesophageal Echocardiogram (TEE), which revealed an aortic valve that appeared to be bicuspid and a 0.9 cm x 0.7 cm calcified mass with adherent vegetations measuring less than 2 mm in length. Blood and urine cultures were negative, therefore empiric treatment for endocarditis with vancomycin, gentamycin, ciprofloxacin, and ampicillin/sulbactam was continued. Per Infectious Disease recommendations, acute convalescent IgM for rare etiologies such as Q fever, mycoplasma, and Legionella were ordered for culture negative endocarditis. The final diagnosis of Legionella endocarditis with embolic phenomena was made when IgM for Legionella was detected. The antibiotic regimen was de-escalated to ciprofloxacin, and his symptoms continued to significantly improve. He was subsequently discharged symptom-free with outpatient follow-up for further evaluation and treatment.

Discussion: This case underscores an atypical presentation of endocarditis and the importance of TEE in evaluation of such cases. The patient had two minor criteria of fever and vascular phenomena on presentation with no known predisposing factors. Moreover, this case illustrates the ability of rare etiologies such as Legionella to present on native valves.

Cannabis-Induced Pancreatitis: A Case Report

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Introduction: Acute pancreatitis is a common cause of hospitalization in the United States. One study noted almost 275,000 admissions in a single year. Common etiologies are cholelithiasis, alcoholism, and medications. Cannabis-induced pancreatitis has been seldom reported in literature prior to this case.

Case: A 54-year-old white female presented to the emergency department for abdominal pain three times in one month. On the first incident, she admitted recent heavy drinking and had an elevated ethanol level. Lipase was normal, and neither CT nor ultrasound showed evidence of acute pancreatitis. She was managed conservatively with bowel rest, IV hydration, and pain medication, and discharged home after three days. Two weeks later, she presented with epigastric pain, subjective fever, nausea, and vomiting. She denied alcohol use or abdominal trauma since the prior admission but reported heavy cannabis usage. Surgical history included cholecystectomy. She took metoprolol for hypertension. Abdominal exam revealed hypoactive bowel sounds, tenderness to palpation in the epigastrium, and guarding. Lipase, AST, and ALP were 3,784 U/L, 101 U/L, and 156 U/L, respectively. Lipid panel was normal. She was again managed supportively and discharged home after three days. Four days later, she presented again with abdominal pain and noted continued marijuana use. She responded well to conservative management.

Discussion: As the most popular illicit drug in the world, the effects of cannabis are well-known. The mechanism behind cannabis-induced pancreatitis is not well understood, but one study suggests agonism of the CB1 receptor may play a role. Another possibility is that marijuana often has chemical additives, commonly known as "lacing". If marijuana was "laced" with a chemical or other additive known to cause pancreatitis, this too could result in pancreatitis. Cannabis-induced pancreatitis is a rare but reported entity in the literature. This diagnosis should be arrived at after other causes have been ruled out in a patient with history of cannabis usage. With the already-present popularity of cannabis, and the growing popularity of legalization of marijuana, cannabis-induced pancreatitis is a condition that may become more common.

Neutropenia and Splenomegaly After the Discontinuation of Methotrexate: A Case of Felty Syndrome

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Introduction: Felty syndrome (FS) is the rare triad of rheumatoid arthritis (RA), neutropenia, and splenomegaly. RA occurs in about 1% of the population, while FS manifests in just 1%-3% of those with RA. It is important to differentiate FS from other life-threatening diseases such as lymphoma, leukemia, and HIV as treatments are markedly different.

Case: A 52-year-old white female with long-standing seropositive RA treated with methotrexate, plaquenil, and adalimumab presented to clinic with chronic bilateral lower extremity neuropathy and significant weight loss. Physical examination revealed tender, deformed joints in the hands and feet bilaterally, with multiple rheumatoid nodules over the extensor surfaces of both forearms. Abdominal exam was significant for mild splenomegaly confirmed by ultrasound. Routine lab work revealed pancytopenia with an absolute neutrophil count (ANC) of 200/mm3. Peripheral blood smear was negative for blasts and large

granular lymphocytes. Review of records revealed that her WBC count had decreased over the preceding 15 months from a peak of 11,700/µL to a nadir of 2,700/µL, with a concurrent decrease in granulocytes. Subsequent bone marrow evaluation was significant for a mildly hypercellular marrow with a polyclonal T-cell proliferation but negative for malignancy. Thorough investigation into other causes, including HIV, were negative. On further questioning, the patient disclosed she had been non-compliant with methotrexate due to peripheral neuropathy, which she attributed to the drug. The decline in her WBC count and profound neutropenia coincided with cessation of her methotrexate therapy. Given the triad of rheumatoid arthritis, neutropenia, and splenomegaly with a negative marrow and no other overt cause, a diagnosis of FS was made.

Discussion: FS is a diagnosis of exclusion, and it is important to rule out other causes of neutropenia even in the presence of splenomegaly and RA. Ultimately, the goal of treatment is to prevent serious infection by augmenting granulocytosis. Methotrexate is considered superior to other agents as illustrated by our patient who saw a precipitous decline in her WBC count and ANC with its cessation, despite the continuation of plaquenil and adalimumab.

Rat Catching Fellow Without the Yellows

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Case: A 42-year-old man with a history of hypertension and hyperlipidemia was admitted to surgery for right upper quadrant (RUQ) pain and found to have cholelithiasis without cholecystitis; surgery was not necessary. The patient complained of body aches and flu like symptoms of two weeks duration, as well as dark and decreased urine output for one week. He was taking eight Tylenols and ibuprofens for four days. On physical exam, he was febrile and tachycardic. He had mild tenderness to palpation in the RUQ and bilateral lower extremity muscles. His serum chemistries revealed elevated liver enzymes, creatine kinase, and blood urea nitrogen/creatinine. He had negative blood cultures and urine culture. Urinalysis demonstrated blood and protein without red blood cells on micro. Vancomycin and pipercillin-tazobactam were initiated, and he became afebrile with normalized WBCs and liver function test but worsening acute kidney injury. All of his medications were stopped. Despite 8-10 liters of intravenous normal saline, his blood urea nitrogen (BUN)/creatinine continued to rise; glomerulonephritis workup was negative. After more history, the patient reported killing a rodent in his house a few weeks prior. Leptospirosis-induced acute interstitial nephritis (AIN) was considered. After renal biopsy, the patient was started on doxycycline and prednisone. His renal function improved, and he was discharged home on doxycycline and prednisone. Renal biopsy showed interstitial nephritis. Serum antigen was diagnostic for leptospirosis.

Discussion: Often misdiagnosed secondary to an array of symptoms, Leptospirosis is a biphasic disease. The disease begins with flu-like symptoms followed by an asymptomatic period, then a more severe second phase characterized by meningitis, liver, and kidney damage (also called Weil's disease). The incubation period is 7-29 days. The bacteria spreads through infected rodent urine, contaminating water/soil, often surviving there for months. Humans become infected through direct urine contact or through contaminated water/soil/food. Bacteria enters the body through skin or mucus membranes, especially if cut or scratched. Other names for Leptospirosis include: Weil's syndrome, canicola fever, canefield fever, swamp fever, nanukayami fever, 7-day fever, Rat Catcher's Yellows, Fort Bragg fever, black jaundice, and Pretibial fever.

Not Your Ordinary Sore Throat

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Case: A 19-year-old man presented with a one-week history of sore throat and cough. Seven days earlier he had been prescribed oral penicillin; however, his symptoms continued to worsen. Initial vital signs revealed temperature 99.7° F, heart rate 126 beats/min, blood pressure 107/62 mmHg, respiratory rate 26/min, and room air oxygen saturation 97%. Examination showed tender right posterolateral neck lymphadenopathy and crackles at the left lung base. White blood cell count was 40.9 $x10^3$/µL with 73% neutrophils and 15% bands. Chest radiograph revealed left-lower lobe airspace disease. Intravenous piperacillin-tazobactam was initiated for suspected pneumonia. His throat pain persisted, and a neck CT revealed right palatine tonsil enlargement with diffuse inflammatory lymphadenopathy. A subsequent chest CT showed numerous pulmonary nodules with multiple areas of consolidation, some of which demonstrated cavitation. Transesophageal echocardiogram revealed no vegetations. Given the concern for embolic phenomenon on CT scan, a Doppler ultrasound of the internal jugular veins was ordered and revealed a partially occlusive thrombus in the right internal jugular vein consistent with Lemierre's Syndrome (LS). All blood cultures returned negative; multiple sputum samples revealed heavy group C *streptococci* growth.

Discussion: Lemierre's Syndrome, or jugular vein suppurative thrombophlebitis, is a condition characterized by infectious involvement of the carotid sheath vessels. Clinical manifestations are the triad of antecedent pharyngitis, septic emboli, and persistent fever. Subsequent thrombophlebitis typically develops within one week of pharyngitis. Clinical warning signs include jugular vein/sternocleidomastoid muscle tenderness and swelling with presence of pulmonary septic emboli on chest radiograph. Ultrasound represents a rapid way to evaluate for jugular venous thrombosis, and CT scan should be utilized to assess for pulmonary abscesses and cavitations. Causative organisms include normal oropharyngeal flora, namely *Fusobacterium necrophorum, Eikenella corrodens and Streptococci pyogenes/bacteroides*. Empiric antibiotic therapy should include a beta-lactamase

resistant beta-lactam antibiotic such as ampicillin-sulbactam or piperacillin-tazobactam. Tailored intravenous antibiotic therapy should be given for at least two weeks, followed by oral therapy for two weeks or until resolution of pulmonary abscesses on CT scan. Anticoagulation is controversial and typically reserved for cases with significant thrombus extension. Given the significant mortality risk and urgent need for intravenous, an increased awareness of LS is warranted.

Colitis Therapeutics (6-MP, Sulfasalazine, Budesonide) Suppress Intestinal Lymphatic Smooth Muscle Tonic Contractility Implications For IBD Therapy?

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Background: The lymphatic system plays a central role in drainage of tissue inflammatory mediators. Lymphatic contractility is an important mechanism that facilitates clearance of inflammatory mediators. In IBD, depression of lymphatic contractility may intensify inflammatory responses. It is unclear how drugs used to treat IBD may influence this phenomenon, which may influence therapy for this condition.

Methods: The effects of different IBD therapeutics on intestinal lymphatic smooth muscle (ILSM) tonic contraction was studied using 1% collagen gel contraction system in vitro. 6-mercaptopurine (6MP), sulfasalazine (5-ASA), and budesonide were added to ILSM gels at concentrations similar to those used in IBD therapy. Tonic intestinal muscle contraction was monitored over four days. Percent contraction was compared between untreated cultures and drug treated gels after four days. Budesonide was used at final concentrations of 5 and 25 nM. 6-mercaptopurine was used at concentrations of 0.5, 2, and 5 ng/ml; sulfasalazine was used at a concentration of 0.2, 1.0, and 5.0ng/ml.

Results: High-dose 6-MP 5 ng/ml showed a significant (37±5.6%, **p<0.01, avg/SE) suppression in contractility (day four), compared to controls (49±5.6%); 2 ng/ml 6-MP also suppressed tissue contractility (43±2.5%) but this did not reach statistical significance; 0.5 ng/ml did not suppress contraction (48±4.1%). Budesonide at low and high doses (5, 25 ng/ml) significantly suppressed contractility (43±4.2% and 42±3.6, both *p<0.05, respectively) compared to control group (50±5.2%). 5-ASA was tested at 0.2, 1.0, and 5.0 ng/ml; we found that only 1 ng/ml significantly suppressed contractility (45±3.1%, *p<0.05) compared to control group (50±3.1%).

Conclusions: While IBD therapeutics are currently used to reduce inflammation, at higher doses some may also depress lymphatic smooth muscle contractile function, which could negatively influence the export of interstitial fluid and its complement of inflammatory mediators from the IBD-inflamed intestine.

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Extragonadal Germ Cell Tumor: A Rapid Grower

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Introduction: Extragonadal germ cell tumors (EGCT), which are defined as germ cell tumors without a primary tumor in the testes, are very rare. Of the 8,000 annual cases of germ cell tumors (GCT), only 2%-5% are of extragonadal origin.

Case: A 22-year-old man presented to the emergency room after acute onset of cough three days prior associated with severe weakness. On initial physical exam, he was afebrile, normotensive, in mild respiratory distress, and mildly tachypneic at 32 respirations per minute. His oxygen saturation was 98% on room air. He had decreased breath sounds and dullness to percussion on the right. Testicular exam was unremarkable. Labs were remarkable for a slight leukocytosis, mild normocytic anemia, and hypoalbuminemia. Alpha fetoprotein (AFP) drawn on initial presentation was elevated at 860. B-hCG and CEA were within normal limits. Chest X-ray revealed complete opacification of the right hemithorax. CT of the chest with IV contrast demonstrated a large right-sided pleural effusion with right-to-left mediastinal shift and numerous heterogeneously-enhancing pleural based lesions, highly concerning for neoplasm. An ultrasound of the scrotum and testicles was obtained and showed a small left-sided hydrocele, but no masses. Thoracentesis was performed and revealed 1,800 cc of bloody fluid, and biopsy was suggestive of either a synovial sarcoma or a poorly-differentiated germ cell tumor. One week following discharge, the patient developed increasing pain and shortness of breath. Repeat CT of the chest showed that the tumor had grown to occupy the entire right hemithorax, with shift of the mediastinal structures to the left. Due to his rapid clinical deterioration, he was intubated and started on empiric chemotherapy with etoposide, ifosfamide, and cisplatin, even before a final diagnosis was made. His tumor responded well to chemotherapy. Repeat biopsy was obtained and was consistent with a germ cell tumor most compatible with yolk sac origin.

Discussion: Mediastinal germ cell tumors are aggressive, rapidly growing tumors, typically found in younger men. Standard treatment consists of platinum-based chemotherapy, usually followed by surgical resection of residual disease. Due to their rapidity of cell growth, these tumors are typically very responsive to chemotherapy.

Mojo-Induced Critical Illness (MICI): A Syndrome of Pseudo-Seizures and Multi-Organ Failure

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Introduction: Synthetic cannabinoids have gained popularity for producing intoxication while avoiding detection on drug screens. They have undergone minimal scien-

tific testing, and potential harmful side effects are not well understood. Here we present two cases of a new syndrome, MICI, encountered in patients immediately after intoxication with the synthetic cannabinoid "Mojo."

Case: Two unacquainted patients, ages 19 (patient A) and 23 (patient B), were brought to their local emergency departments after family witnessed repeated episodes of loss of consciousness followed by thrashing of the arms/legs. Both patients were disoriented, uncooperative to questioning/commands, and extremely agitated. Both were intubated, started on propofol infusions, and transferred to Ochsner Medical Center for presumed status epilepticus. Past medical history was limited to a one-year history of questionable seizures (patient A) and poorly controlled status asthmaticus (patient B). The patients' mothers each reported their sons' heavy use of "Mojo" to avoid positive drug tests. Each had negative toxicology panels. CT, MRI, and EEG were negative for any acute process/seizures. Both developed acute hypoxic respiratory distress, tachycardia, persistent leukocytosis despite broad antibiotic coverage, rhabdomyolysis, and acute renal failure requiring emergent dialysis. After 21 days, patient A was discharged in stable condition. He adamantly refused all substance abuse other than smoking "Mojo" the night prior to presentation. Patient B became progressively hypoxic, hypercapnic, acidotic, with leukocytosis greater than 70,000, and creatine kinase greater than 40,000, despite prompt discontinuation of propofol. He was treated with lung protective ventilation, nitric oxide, broad spectrum antibiotics, but developed hypotension despite three vasopressors. On ICU day 11, he died surrounded by family.

Discussion: MICI is a clinical syndrome that mimics status epilepticus. In this case report, after being admitted, both individuals developed similar patterns of multi-organ failure that included acute respiratory failure, severe rhabdomyolysis, and acute kidney failure requiring dialysis. Although much remains unknown, we believe MICI is an important clinical syndrome that should be recognized by healthcare providers.

Demographic Impact on Asthma and Health-Related Quality of Life - A Pilot Study

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Background: Asthma is a chronic inflammatory disorder with significant morbidity and mortality. It is a medically managed disease affected by proper medication reconciliation. Presumably, the higher the compliance, the better control of asthma and improved health-related quality of life (HRQOL). We analyzed the impact of demographic factors on a patient's ability to access medications and disease comprehension.

Methods: IRB approval was obtained. Adults with asthma were studied at allergy-immunology clinics. Informed consent was obtained from all research subjects. Asthma control test (ACT) and HRQOL, via SF-36 standard quality-of-life scores, were assessed and demographics collected. Compliance was determined by ascertaining proper medication usage.

Results: 49 bronchial asthmatic patients were studied – 14 in charity clinics and 35 in private clinics. Insured patients had mean SF-36 of 42.40 compared to uninsured patients who had mean of 35.94 (p=0.04). Analysis of the different income levels with ANOVA model showed statistical significance (p=0.01) for SF-36. Upon further analysis between income levels of less than $25,000 and more than $50,000, the mean was 38.66 and 47.58 (p=0.01). Analysis of clinic location, age, and education level were not statistically significant, although there was a trend in SF-36 and ACT scores. In private clinics, the mean SF-36 and ACT scores were 42.27 and 16.69, while in charity clinics, 39.02 and 14.64. Older age groups had a lower SF-36 when comparing younger age group. For patients aged 18-25, mean SF-36 was 45.33, 25-50 years old was 41.73, and older than 50 was 40.69. Higher education level demonstrated improved SF-36 and ACT scores. Patients who did not complete high school had mean SF-36 and ACT scores of 37.90 and 14.14, high school graduates were 39.94 and 15.43, and college graduates were 44.31 and 17.63.

Conclusion: Patients with health insurance and higher income have an improved quality of life and better asthma control. Higher education was associated with better quality of life and asthma control, although the differences were not statistically significant.

Vagus Nerve Palsy Caused By Herpes Zoster: A Case Report

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Introduction: Vagal Nerve Palsy due to herpes zoster represents a unique presentation of a common clinical entity. We report a case of vagus nerve palsy in a patient with hoarseness and dysphagia. Diagnosis was made by findings of uvula deviation, classic herpetic lesions, and direct laryngoscopy visualizing unilateral vocal cord paralysis.

Case: A 67-year-old female with a past medical history of gastroesophageal reflux disease (GERD), migraine headaches, hyperlipidemia, and breast cancer status post-bilateral mastectomy. The patient was currently receiving treatment with neoadjuvant chemotherapy, including adriamycin and cyclophosphomide. She presented to the ED with a two-day history of hoarseness and dysphagia. Physical exam findings included uvula deviation to the right. All other cranial nerves were intact. Review of systems elicited paresthesia over the left lateral cervical region without associated skin findings. The remainder of the physical exam, as well as laboratory results, was unremarkable. In the emergency room, the patient developed tachypnea with audible stridor. An Ear, Nose, and Throat specialist (ENT) was consulted, and the patient was given empiric steroids and nebulizer treatments. The ENT performed direct video laryngoscopy,

which revealed unilateral left vocal cord paralysis. The patient was then admitted for further management. On hospital day two, she developed new vesicular lesion at the level of the left C3 dermatome. Infectious disease was consulted for lesions consistent with herpes zoster. Empiric steroids were stopped and ganciclovir was prescribed as acyclovir was unavailable. By hospital day five, the patient's hoarseness and dysphagia had significantly improved. She was treated with ganciclovir for a total of two weeks with complete resolution of symptoms.

Discussion: Varicella zoster can become latent in the cranial nerve and dorsal root ganglia, reactivating later in life to produce shingles. Herpes zoster involving the seventh cranial nerve is well documented in the literature; however, isolated cranial nerve 10 involvement is rare. The diagnosis of vagus nerve palsy caused by herpes zoster is achieved by findings of uvula deviation and direct laryngoscopy of unilateral vocal cord paralysis, along with coinciding herpetic lesions of the head and neck. Early recognition and treatment with an antiviral agent is important for improved clinical outcomes.

The Herbicidal Patient: Delayed Onset of Multi-Organ Failure and the Importance of the *Material Safety Data Sheet*

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Introduction: Ingestion of toxic chemicals, particularly organophosphates and the resultant physiologic effects are well known by physicians. However, not all herbicides contain organophosphates. The *Material Safety Data Sheet* (MSDS) provides the starting point to evaluate toxic presentations of various herbicide components.

Case: A 48-year-old Hispanic male with a past medical history of type 2 diabetes, hypertension, and depression was transferred to our hospital for psychiatric services after being evaluated 24 hours earlier at an outside hospital for a suicide attempt after consuming 32 oz of an extended control weed and grass killer. The patient had been evaluated within an hour of toxin consumption and was given activated charcoal; vital signs were stable and serial labs drawn were unremarkable. Medicine was consulted to evaluate hyperglycemia. At the time of evaluation, the patient complained of diarrhea, odynophagia, dysphagia, abdominal pain, and chest pain with food ingestion. Vital signs at the time were BP 126/62, HR 120, RR 14, T 98.9F. On physical exam, he was oriented, diaphoretic, had mild tachypnea, tachycardia, and Zargar Grade 2a caustic injury of his lips and oropharynx. Labs revealed WBC 18.5, 20% bands, glucose 623, CO2 18, BUN 57, Cr 6.42, AST 472, ALT 324, TBili 1.3, INR 0.8, AØ 70, with a AG = 18, Osm Gap = 15, and ABG 7.31/29/81/14.6. N-Acetylecysteine was started per poison control recommendations. The patient became anuric, with worsening metabolic acidosis, renal, and hepatic function. Following transfer to the ICU, he experienced respiratory decompensation requiring intubation. The patient had cardiac arrest and could not be resuscitated.

Discussion: Review of the MSDS revealed the presence of *Dicamba* and *Diquat dibromide*. The toxicology profile of *Diquat dibromide* seemed to fit our patient's symptoms and labs. *Diquat* is corrosive substance, is renally excreted, and ingestion is usually fatal. Severe gastrointestinal irritation, tissue dehydration, nausea, vomiting, diarrhea, chest and abdominal pain, and respiratory distress are seen. Labs demonstrate toxic liver damage and kidney failure. Our patient appeared to have absorbed a significant amount of the toxin, despite early charcoal treatment. Confirmed herbicide ingestion and subsequent medical clearance does not rule out further delayed toxicity.

Shock to the Heart ... A Blow From a Surprising Liver Mass

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Case: A 76-year-old man with hypertension, coronary disease, and diabetes presented for routine follow-up. Social history was negative for alcohol, tattoos, travel, or illicit drug use. He denied blood transfusions or chemical exposures. Exam was benign. Labs revealed alkaline phosphatase 198 IU/L (38-126) and aspartate transaminase 49 IU/L (15-41). Bilirubin, creatinine, coagulation, and complete blood counts were normal; low-density-lipoprotein 86 mg/dl and hemoglobin A1c 6.8%. Alkaline phosphatase fractionated as hepatobiliary origin. HIV and hepatitis panels were negative. Abdominal ultrasound revealed an 8 cm hepatic mass. Computed tomography (CT) revealed a 12 x 8 cm mass, inferior vena cava (IVC) compression, but no evidence of cirrhosis. He was referred to hematology-oncology, where repeat imaging one month later revealed an 11 x 13cm mass with IVC tumor infiltration and extension to the right atrium (RA), where a 4 x 4 cm mass was noted. Alpha-fetoprotein (AFP) was normal. Biopsy revealed moderately differentiated HCC; some hepatocytes had fatty changes, but no evidence of hemosiderosis or cirrhosis.

Discussion: HCC is the third-leading cause of cancer-related mortality worldwide. Seventy-five percent of cases are attributable to viral hepatitis. Non-viral cases are due to non-alcoholic fatty liver disease. Most HCC cases are associated with cirrhosis caused by viral hepatitis or alcohol. Cases of HCC in non-cirrhotics are typically symptomatic and occur in older adults. HCC commonly metastasizes to lymph nodes, bone, and lung. It also has a propensity for vascular invasion. Tumor extension to the portal system is common; invasion of the IVC and/or heart without invasion of the portal system is rare. Most patients with cardiac involvement also had cirrhosis and symptoms that included dyspnea, edema, shock, right heart failure, pulmonary emboli, or sudden death. Mean survival in HCC patients with IVC or RA extension is four months regardless of treatment; therefore, aggressive therapy is often futile. To our knowledge, this is the first patient without hepatitis or cirrhosis to present asymptomatically with cardiac involvement of HCC. Our case is also unique in that the etiology of this patient's HCC remains cryptogenic.

Intravenous Sodium Thiosulfate For Treatment of Calcinosis in Rheumatic Disease

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Introduction: Calcinosis, or dystrophic calcification, is a poorly understood and debilitating condition that is a common manifestation in connective tissue diseases such as scleroderma and systemic lupus erythematosus. Currently, many treatment modalities have been tried with minimal success. While intravenous sodium thiosulfate (STS) is used to treat calciphylaxis and cyanide toxicity, data is not readily available regarding its use in calcinosis. Due to similar proposed mechanisms of disease, the administration of intravenous STS may have a role in the treatment of calcinosis in patients with rheumatic disease.

Case: A 63-year-old woman with a history of limited scleroderma with calcinosis and Raynaud's syndrome, presented to clinic after being treated by an outside physician. For several years, she had recurrent calcinosis deposits on her hands, wrists, knees, and elbows, which caused chronic pain and limited range of motion. These symptoms persisted, despite being treated with appropriate scleroderma therapy. Her calcinosis was treated with corticosteroids, colchicine, calcium channel blockers, and surgery with minimal change in pain level and functional status. After discussion regarding risks and benefits of intravenous thiosulfate, a 25-gram infusion of thiosulfate over one hour, per week was initiated. Despite missing several infusion sessions throughout the year, and receiving 12.5 gram infusions at times, she reported significant improvement in pain and range of motion in her extremities. Overall, the infusions were tolerated well, despite one episode of blurry vision and elevated temperature.

Discussion: This case illustrates the potential use of intravenous STS in patients suffering from calcinosis. Calcinosis affects approximately 25% of patients with scleroderma and may lead to severe disability, pain, and infection. While both mechanisms of disease are poorly understood, calcinosis is pathologically different than calciphylaxis. However, the mechanism of action of STS may also benefit calcinosis. One proposed mechanism of action involves the formation of water soluble calcium-thiosulfate complexes that dissolve existing insoluble calcium salts embedded in tissue. STS may also improve endothelial function through its antioxidant and anti-inflammatory properties. Our case highlights the need for further studies of intravenous STS as a potential treatment option for calcinosis.

Dilated Cardiomyopathy Secondary to Mitochondrial Encephalopathy With Lactic Acidosis and Stroke-Like Episodes

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Introduction: Mitochondrial encephalopathy with lactic acidosis and stroke-like episodes (MELAS) is a maternally inherited mitochondrial syndrome typically diagnosed in childhood or early teenage years. The stroke-like episodes typically present in a relapsing-remitting manner with gradual neurological decline leading to dementia.

Case: A 32-year-old African-American male with a diagnosis of MELAS, confirmed by muscle biopsy eight years prior, presented with a two-month history of shortness of breath, dyspnea on exertion, and lower extremity edema. The patient was afebrile with a blood pressure of 108/90, heart rate of 103, respiratory rate of 20, and a room air oxygen saturation of 100%. Cardiac exam revealed a III/VI holosystolic murmur heard best at the apex and an S3. Lung exam was unremarkable. He had bilateral lower extremity pitting edema extending to his hips. Laboratory studies showed a WBC count of 5.7 K/uL with 71% neutrophils. His complete metabolic profile revealed a HCO3 18 mmol/L, BUN 38 mg/dL, creatinine 1.67 mg/dL, bilirubin 3 mg/dL, AST 92 U/L, ALP 213 U/L, and ALT 100 U/L. BNP was greatly elevated at >5,000 pg/mL. Initial troponin was elevated at 0.14 ng/mL and peaked at 0.17 ng/mL. Lactic acid was also elevated at 3.9 mmol/L. Urinalysis did not contain any protein. Urine electrolytes revealed a fractional excretion of sodium of 6.7%; no urine eosinophils were present. EKG demonstrated normal sinus rhythm with evidence of left atrial enlargement, and chest X-ray revealed mildly increased pulmonary vasculature. The patient was found to have four-chamber enlargement, moderate to severe tricuspid regurgitation, and an ejection fraction <20% by echocardiogram. Diuresis with IV furosemide provided improvement in his respiratory status and edema; however, he continued to be oxygen-dependent at the time of discharge.

Discussion: MELAS is a rare mitochondrial disorder that not only affects the nervous system, but can also have cardiac, renal, and endocrine manifestations, as were seen in this patient with a dilated cardiomyopathy, renal insufficiency, and diabetes mellitus. A hypertrophic cardiomyopathy is more commonly associated with MELAS, but a dilated cardiomyopathy has also been described.

Acquired Hemophilia A: The AHA Moment

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Introduction: Recognition of Acquired Hemophilia A (AHA) without personal or family history of bleeding is difficult. The infrequency of this disease warrants awareness of its relatively complicated diagnostic ladder and laboratory findings.

Case: A 47-year-old African-American male with past medical history of AIDS and anaplastic large cell lymphoma stage II in remission after chemo and radiation therapy in 1998 presented to the emergency department for continuous hemorrhaging for four hours after tongue biopsy. The biopsy site was sutured, and he was discharged home. Two months later, the patient presented to the ED with large, painful, erythematous areas of swelling to the left antecubital

fossa, popliteal area of left leg and lower right calf. Because of painful ambulation, he had been using crutches for days prior. He was admitted to the hospital. Workup revealed elevated partial thromboplastin time (PTT) of 75.6 seconds (N= 24.7-35.5 seconds), normal prothombin time (PT), and international normalized ratio (INR). Mixing studies yielded an uncorrected and prolonged activated PTT of 63.6 seconds after two hours. Measurement of Factor VIII inhibitor yielded an elevated 432 Bethesda units/ml (reference range: <1.0 U/ml). Factor VIII activity was decreased to <0.6% (reference range of 50-100%). AHA was diagnosed. However, lupus anticoagulant was positive. Patient was immediately started on treatment with prednisone and rituxan followed by cytoxan. PTT after treatment decreased to 28.5 seconds. The patient had no further episodes of extremity bleeding or swelling.

Discussion: AHA is a rare and life-threatening bleeding disorder caused by auto-antibodies against Factor VIII. It most commonly occurs in patients more than 65. Although it may be associated with autoimmune disorders, malignancies, and medications, half of reported cases remain idiopathic. This patient with a relatively mild presentation of AHA had a positive coexisting lupus anticoagulant and Factor VIII inhibitor. The presence of both simultaneously is exceedingly rare and may denote a protective mechanism in a grave bleeding disease.

Chylous Ascites in Kaposi Sarcoma: A Case Report

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Introduction: Chylous ascites is a known complication associated with Kaposi sarcoma (KS). There are only three reported cases of chylous ascites in patients with KS.

Case: A 26-year-old Caucasian male with a history of AIDS (CD4-123), KS, pleural effusion, and pulmonary emboli was admitted for diffuse abdominal pain and scrotal edema. Physical exam was notable for tachycardia, pallor, decreased basilar breath sounds, diffuse abdominal pain with distention, positive fluid wave and shifting dullness without rebound or guarding, tender scrotal edema, inguinal adenopathy, and purple lesions on his upper palate and torso consistent with KS. A prior EGD and colonoscopy showed Kaposi's lesions throughout the GI tract. An abdominal CT revealed diffuse adenopathy. A paracentesis was performed and 1,510 mL of milky, turbid, blood-tinged fluid was removed. Fluid analysis was negative for malignancy but demonstrated 36,300; RBCs and triglycerides concentration of 740 mg/dL. The patient was started on liposomal doxorubicin for his KS during his hospitalization and finally achieved adequate pain control and improvement of his ascites and scrotal edema after three rounds of treatment as an outpatient.

Discussion: Chylous ascites is an uncommon finding that is caused by the presence of intestinal or thoracic lymph in the peritoneal cavity. Chylous ascites is diagnosed by milky ascitic fluid with a triglyceride content typically greater than 200 mg/dL. Causes of chylous ascites include: malignancy, trauma, chronic liver disease, inflammation, and infection. Disruption of the lymphatic system from obstruction or traumatic injury is the underlying mechanism for the formation of chylous ascites. While the exact cell of origin for KS remains unclear, the current opinion is that KS tumor cells are derived from lymphatic endothelium. Hence, the development of chylous ascites may possibly be due to in-situ KS in that region rather than metastasis to the thoracic duct as once thought. Chemotherapy for KS can often improve symptoms (response rate 60-90%) as was seen in our patient.

Treatment of Cutaneous Neoplasm With Spray Cryotherapy

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Introduction: Cutaneous neoplasms are a therapeutic challenge and produce a significant burden on the healthcare system, particularly in the elderly population. Treatments producing significant eradication rates with acceptable cosmesis at a low cost are needed. High energy transfer (25-W) spray cryotherapy technology using a unique liquid nitrogen (LN2)-based catheter delivery system successfully treats and eradicates neoplastic tissue and is FDA approved. We report the initial safety and feasibility results of 23 patients, 53 lesions, treated at various sites including head, neck, trunk, and extremities.

Methods: Spray cryotherapy is a rapid energy transfer technology employing liquid nitrogen sprayed through a long catheter at -196^{o}C. Twenty-three patients with biopsy-proven skin neoplasia were treated under local anesthesia in an outpatient setting. Treatment parameters included duration of spray and the number of freeze and thaw cycles. Lesions were re-examined for clinical response, cosmesis, and the need for re-treatment at 1, 4, 8, and 12 weeks.

Results: Spray cryotherapy was easily delivered and covered all visible lesions with minimal bystander side effect. Visual re-examination demonstrated complete clinical responses in 21/23 patients and 51/53 lesions. Mean follow-up is nine months. Two patients had lesions with partial responses, which were excised. Minimal pain, good wound healing, and no adverse effects occurred. The desired clinical was achieved within 30 days. Side-effects included one patient with edema at the treatment site. A superficial distant injury inadvertently occurred during readying of the catheter.

Discussion: Current therapeutic modalities include surgery and radiation; both efficacious but costly, painful, and often complex with variable cosmetic outcomes. Spray cryotherapy offers a low complexity, relatively low-cost therapeutic option for these neoplasms. These results suggest that this technique is safe, effective, and successful for tumor eradication and reduction. Our initial findings warrant a multi-center prospective trial.

Corynebacterium Bacteremia - Not Always a Contaminant
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Case: A 56-year-old African-American male with past medical history of HIV presented to an outside hospital with hemoptysis and fatigue for two weeks. He denied fever, shortness of breath, recent travel, and sick contacts. He was non-compliant with HAART for three years. He quit smoking two years ago. He was afebrile and cachectic in appearance. Chest exam revealed decreased breath sounds, and dullness to percussion in the right-posterior field. WBC count was 8.9 x 10^9/L with 85% neutrophils and 6% bands. Blood culture grew gram-positive coccobacilli. Chest X-ray showed a right upper lobe cavitary lesion. The patient was started on empiric vancomycin and ceftriaxone. CD4 count was 3. CT chest showed a thick-walled cavitary mass with air-fluid level in the right mid-upper lobe. Sputum AFB smears were negative. Sputum culture isolated normal respiratory flora. Fungal and mycobacterial blood cultures were negative. Repeat blood cultures grew the same gram-positive rod that was identified as Corynebacterium species. The isolate was sent to a reference lab where it was identified as *Rhodococcus equi* (formerly *Corynebacterium equi*). The patient was treated with vancomycin, imipenem/cilastin, rifampin, and levofloxacin. Resolution of symptoms was noted in 10 days. Bacteremia resolved in a month. HAART was restarted. Outpatient follow-up in two months showed resolution of lung abscess, improvement in CD4 count, and undetectable HIV viral load. Levofloxacin and rifampin was planned for additional six months.

Discussion: *Rhodococcus equi* is a gram-positive, aerobic, non-motile intracellular weakly acid fast coccobacilli. It is often overlooked or discarded as non-pathogenic coryneform. It causes lung infection in horses and cattle. Most human infections are noted post-animal exposure or in immunocompromised. It causes subacute to chronic bronchopneumonia complicated by abscess and suppurative involvement of distant sites - brain and skin. Blood cultures are positive in 25%-50% cases. It is treated with more than two antimicrobials until clinical improvement. This is followed by two oral antibiotics for at least six months. HAART therapy should be initiated in HIV positive patients.

Hemophilia A is Not a Disease Just For Kids
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Introduction: Acquired factor VIII inhibitors (also referred as Acquired Hemophilia A) is a rare bleeding diathesis caused by autoantibodies directed against clotting factor VIII and is associated with bleeding involving soft tissues.

Case: A 79-year-old Caucasian male presented to the emergency room with complaints of right hip pain and left elbow pain for two weeks after falling. On physical exam, he had a large edematous area with significant ecchymosis over his right gluteal area and left elbow. He was anemic with a Hgb of 6.2 g/dL and an MCV of 90 fL. His platelet count was normal, 300K/µL. A CT scan of the pelvis showed a large right-sided retroperitoneal hematoma and subcutaneous hematoma. Coagulation studies revealed a PT of 11.2 s, INR of 1.0, and a PTT elevated at 113 s. The patient was unaware of any bleeding disorders in his or his families' past medical history. D-dimer and fibrinogen were elevated so DIC seemed less likely. He received fresh frozen plasma and prothrombin complex concentrate, each improved his PTT temporarily. A mixing study did not correct. Further coagulation studies showed a low Factor VIII activity level of 8 IU/dL and an elevated Factor VIII inhibitor level of 28 BU/mL. The patient was diagnosed with an acquired factor VIII inhibitor. He was started on rituximab and received recombinant factor VIIa after a bleeding episode. His PTT improved and dropped as low as 71 s; however, he became unstable after developing abdominal compartment syndrome from the large pelvic hematoma and went into cardiopulmonary arrest and died.

Discussion: Differential diagnosis of a prolonged PTT with normal PT includes deficiencies of factors VIII and IX, as well as inhibitors of these factors. A mixing study is used to confirm the presence of an inhibitor. Confirmation of a factor VIII inhibitor is made with low factor VIII activity levels and elevated factor VIII inhibitor levels. Treatment involves attempts at raising factor VIII levels with DDAVP and factor VIII concentrates and to bypass factor VIII with activated prothrombin complex concentrates or recombinant factor VIIa in cases of bleeding. Agents used to eliminate the inhibitor include rituximab, cyclophosphamide with prednisone, IVIG, and cyclosporine.

Stressed, Stiff, and Spastic - More Than Just Graves' Hyperthyroidism
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Introduction: Stiff-Person syndrome (SPS) is a rare neuroimmunologic disorder characterized by elevated glutamic acid decarboxylase antibody (GADA) titers and progressive rigidity, stiffness, and painful spasms of the axial muscles. It is associated with other autoimmune conditions, including type 1 diabetes mellitus and rarely, autoimmune thyroid disease. We describe SPS in a patient presenting with thyrotoxicosis.

Case: A 23-year-old woman presented with two weeks of bilateral lower extremity pain. She was tachycardic (130 bpm), tremulous, and hyperreflexic with left leg spasms. Increased muscle tone, decreased range of motion, pedal edema, left foot tenderness, and lumbar lordosis were also noted. Autoimmune-mediated hyperthyroidism was confirmed with thyrotropin <0.01 [0.4-4.0 IU/mL], total thyroxine 18.1 [4.5-11.5 ug/dL], total triiodothyronine 141.88 ng/dL [60-180 ng/dL, thyroperoxidase antibodies 131.5 [<6 IU/mL], and thyroid stimulating immunoglobulin 423 [<140%]. Creatinine kinase and aldolase were 2682 [20-180 U/L] and 19.7 [<7.5 U/L], respectively. Impending thyroid storm pre-

cipitated transfer to a tertiary referral center. Thyrotoxicosis was treated with propylthiouracil, propranolol, iodine, and steroids with clinical improvement. Lower extremity spasticity and muscle stiffness persisted; however, brain MRI was unrevealing. GADA elevations (1,612 [≤0.02 nmol/L]) confirmed clinical suspicions of SPS. She responded to a combination of baclofen and intravenous immunoglobulin (IVIG). Her Graves' hyperthyroidism was eventually treated with I^{131} ablation; subsequent hypothyroidism required levothyroxine therapy. GADA has been as high as 44,147 [<0.5 U/mL] during worsening SPS symptoms, requiring further IVIG infusions. She achieved clinical stability of her SPS symptoms with a combination of baclofen, intermittent IVIG infusions, and clonazepam. Recent GADA was 528 [≤0.02 nmol/L].

Discussion: This case of SPS highlights the importance of clinical suspicion for other autoimmune conditions. Muscle spasticity and stiffness are atypical of thyrotoxicosis. Early recognition of an uncharacteristic presentation of Graves' hyperthyroidism resulted in expedient diagnosis and therapy in this patient, and combination therapy has resulted in favorable SPS symptom control.

Solid Pseudo-Papillary Tumor of the Pancreas

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Case: A 21-year-old African-American woman with a past medical history of pancreatitis and morbid obesity was initially admitted with pancreatitis with intractable nausea and vomiting for pain control and IV hydration. Shortly after discharge, she again presented with pancreatitis symptoms, with an elevated lipase level of 575, and was transferred to our medical center. The patients' epigastric pain continued to persist, rated as a 9/10 constant sharp/stabbing with radiation to her back, and worsened with oral intake. There were no alleviating factors noted. On admit to our facility, the patient was afebrile and hypertensive (157/107) and had a BMI of 49. Labs on admit showed slightly elevated lipase level of 67 and anemia (hemoglobin 9.7 hematocrit 31.7). Treatment was started with intravenous fluids and pain medication, a CT scan of her abdomen showed a 4.5 cm circumferential mass in the body of the pancreas without pancreatic ductal dilatation. Endoscopic ultrasound and fine needle aspiration of this mass showed scattered clusters of cells with variation in size and shape and papillary structures seen in some clusters. These findings were consistent with solid pseudopapillary tumor of the pancreas. The patient was subsequently scheduled for a distal pancreatectomy and splenectomy. On follow-up, the patient remained pain symptoms free.

Discussion: Solid pseudo-papillary tumor of the pancreas, also known as Frantz's tumor, is a rare previously misdiagnosed neoplasm affecting young females with a 10:1 predilection toward females and a mean age of 24. This tumor typically carries a better prognosis compared to adenocarcinoma and has a low likelihood of metastatic disease; however, it does have the ability to invade local structures. Most patients present with vague abdominal pain, nausea, and vomiting, mostly due to the mass effect of the neoplasm on surrounding structures. Diagnosis can usually be confirmed by biopsy and cytology, leading to visualization of solid and pseudo-papillary in sheets of uniform, epitheloid cells situated around a microvascular stalk. Treatment includes distal pancreatectomy and aggressive surgical approach for possible metastatic disease. Following resection of the neoplasm, survival is 95% at a five-year interval.

Scratch Me If You Can: A Case of Peliosis Hepatitis and Splentis

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Introduction: Peliosis Hepatitis is a rare vascular condition characterized by multiple blood-filled cysts within the liver parenchyma. Due to multiple etiologies and a vague presentation, this diagnosis requires a thorough history and complete diagnostic workup.

Case: A 23-year-old African-American male with a past medical history of HIV (CD4 = 650 cells/mm^3) presented to the emergency department with a chief complaint of left upper quadrant abdominal pain for seven days. The pain was described as acute, intermittent, sharp, worse with inspiration, and radiating to his left shoulder. His other symptoms included fever; four to five episodes per day of non-bloody, non-bilious emesis; and four to five episodes per day of non-bloody loose stools. On physical exam, the patient was febrile, tachycardic, tender to palpation at the LUQ, and had palpable hepatosplenomegaly. Abdominal CT scan revealed multiple small hypodensities in the liver and spleen that were concerning for micro-abscesses and a large area of hypoattenuation in the spleen extending to the periphery. Upon further investigation of patient's exposure history, he revealed that several months prior to admission he began to care for a stray kitten. He denied any sick contacts, recent travel, or any other exposure history. Serology for *Bartonella henselae* and ultrasound-guided biopsy of his liver lesions were obtained. Serology titers for *Bartonella henselae* IgM were positive (1:80), and liver biopsy revealed a mixed inflammatory infiltrate including neutrophils and eosinophils with adjacent fibrosis. In addition, there were nonspecific findings in the setting of positive serology suggestive of Bacillary Peliosis. Subsequently, therapy was transitioned to Doxycycline twice daily for eight weeks. Repeat imaging seven months later demonstrated resolution of his lesions.

Discussion: The fastidious nature of these organisms often precludes them from being found on cultures and tissue samples. Peliosis hepatitis is often an incidental finding on abdominal imaging. Thus, this case illustrates an occurrence of peliosis hepatitis caused by *Bartonella henselae*, elucidating the imperativeness of obtaining a detailed history in HIV positive patients.