Abstracts From The Annual 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 then the scores from all 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; 12 poster) were presented at the Associates Meeting held at Tulane University Health Sciences Center in New Orleans on January 27, 2015. 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.

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CAT GOT YOUR EYE?

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Introduction: Bartonella hensalae (CSD) is a gram negative bacilli causing variety of clinical sequelae. Patients usually develop lymphadenopathy and fever but in rare cases (1%-2%) neuro-retinitis can occur.
Case: A 26-year-old woman with no known past medical history presented with left eye pressure, blurry vision, and headache for seven days. Symptoms started after she woke up with a left sided, non-radiating, pressure-like headache rated as 8/10. She described not being able to focus and having blindness in her left eye. She was evaluated by the ophthalmology department who diagnosed her with having papilledema. The differential diagnosis included neuro-retinitis, optic neuritis, or intercebral hemorrhage (ICH). On physical exam she had no lymphadenopathy. However her left eye had central blindness without peripheral vision compromise. On dilated fundus exam (DFE) she had striae and diffuse grade III optic nerve hypoplasia (ONH) edema. Laboratory tests were unremarkable. Magnetic resonance imaging (MRI) and lumbar puncture were normal. After inquiring more about the patient's social history it was discovered that she was scratched by cat several earlier. This additional information made neuro-retinitis the top differential diagnosis. The Bartonella hensalae IgG returned positive and she was started on steroids along with double strength sulfamethoxazole-trimethoprim due to a doxycycline allergy. Her symptoms almost resolved during her 3 day hospital course. Two weeks later, the ophthalmology department noted that her papilledema had resolved, and her vision was back to baseline.
Discussion: Disease manifestations from Bartonella hensalae result from either local infection like lymphadenopathy or from blood borne disseminated infection such as occurs with neuro-retinitis. Following inoculation, invasion of endothelial cells causes an acute inflammatory reaction associated with activation of pro-inflammatory cascade. Retinal findings may include hemorrhages, cotton wool spots, multiple discrete lesions in deep retina and stellar macular exudates (known as macular star) which may take 1-4 weeks to develop. As demonstrated in our case, the diagnosis is frequently more challenging than the treatment.

A RARE MULTISYSTEMIC DISEASE WITH AUTOIMMUNE ETIOLOGY

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Introduction: Voght Koyonagi Harada syndrome (VKH) is a rare systemic disorder involving many organ systems. VKH results from T-cell mediated autoimmune reaction against melanocyte antigens in genetically predisposed patients.
Case: A 23-year-old woman presented to the internal medicine clinic complaining of distorted vision, bilateral eye pain, headaches, tinnitus, hyperacusis and fatigue for three weeks. She also complained of generalized rash, photophobia, nausea and vomiting. She denied recent trauma. On physical examination there was neck stiffness with no other signs of meningismus. She had a pruritic, scaly, non-tender papular rash on her upper extremities and trunk. There was redness in the eyes, marked decrease in visual acuity and bilateral retinal edema. Baseline tests along with a C-reactive protein test (CRP), anti-nuclear antibody test (ANA), rapid plasma regain test (RPR), HIV and purified protein derivative test

(PPD) were ordered. A lumbar puncture showed cerebral spinal fluid (CSF) pleocytosis and the patient was referred to the ophthalmology department, the otolaryngology department and the neurology department with a preliminary diagnosis of VKH after infectious causes were eliminated. Slit lamp examination showed bilateral posterior uveitis. Dilated fundus examination revealed bilateral serous retinal detachment. Magnetic resonance imaging of the brain showed thickening of the posterior orbits suggestive of complex inflammation. She was started on 80mg prednisone daily. She responded well, however, after two months she started developing side effects. She was switched to azathioprine but developed generalized rash. The rheumatology department was consulted and she was started on adalimunab with resolution of symptoms.
Discussion: Early recognition and treatment of acute VKH is of utmost importance for a good visual outcome. On the other hand when infectious uveitis is misdiagnosed with VKH and treated with immunosuppression, it can lead to disastrous results. Most patients develop complications including cataract, glaucoma, choroidal neovasculaization, retinal detachments, and macular edema. Treatment often requires at least six months of high dose steroids. Immunosuppressive therapy is required in cases of steroid intolerance or resistance, chronic recurrent phase of the disease and for patients with severe disease or delayed diagnosis at presentation.

ANEMIA IN AN HIV INFECTED PATIENT: PARVO THE COURSE?
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Introduction: Anemia is a common complication in HIV-infected patients, usually associated with medications, vitamin deficiencies, chronic disease, opportunistic infections, malignancies, or direct effects of HIV.
Case: A 29-year-old trans-gender patient with a history of HIV/AIDS (CD4 count 10 cells/mm3, viral load 227,431 copies/mL (not on anti-retroviral therapy) presented with 1-2 weeks of progressive dyspnea on exertion and lightheadedness. She denied cough, wheezing, or blood per rectum, dark stools, changes in color of urine, or gingival bleeding and had no history of orthopnea, chest pain, or palpitations. The patient's heart rate was 106 beats/min, blood pressure was 80/56 and temperature was 100.9 oF. She had pale mucous membranes and conjunctiva and a 2/6 systolic ejection murmur over pulmonic valve. Rectal exam was unremarkable. Laboratory studies revealed hemoglobin of 3.0 gm/dl with peripheral smear showing reduced red blood cells and a mixture of microcytes, teardrop cells with slight hypochromia; there were no white cell blasts or dysplasia, platelets were normal. Reticulocyte percentage and index were low at 0.5% and 0.04%, respectively. Iron studies were consistent with chronic disease with ferritin elevated at 831, iron 60, and total iron binding capacity low at 170. Bilirubin, haptoglobin, and lactate dehydrogenase levels were not consistent with hemolysis. Bone marrow (BM) biopsy showed numerous giant proerythroblasts, classic finding for parvovirus B19 infection. BM stains and peripheral blood polymerase chain reaction (PCR) tests were also positive for parvovirus B19. The patient initially responded to transfusion of packed red blood cells, but at one month follow up had persistent anemia with hemoglobin of 6. Intravenous immunoglobulin infusions were started at that time, and her hemoglobin stabilized.
Discussion: Pure red cell aplasia (PRCA) is defined as anemia with reticulocytopenia and absence of normal red cell precursors in the bone marrow. An acute PRCA from direct viral infection, called transient aplastic crisis (TAC), can occur with parvovirus B19 infection. Though rare, Parvovirus B19 infection should be suspected in an immunocompromised host with persistent anemia requiring frequent blood transfusions.

CRIBRIFORM -MORULAR VARIANT OF THYROID CANCER - A RED FLAG FOR FAMILIAL ADENOMATOUS POLYPOSIS
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Introduction: Familial adenomatous polyposis (FAP) is an autosomal dominant syndrome characterized by the development of colorectal adenomas which may be caused by mutations of the Adenomatosis polyposis colon gene. Patients with FAP are at risk for several additional intestinal malignancies including well-differentiated thyroid cancer, childhood hepatoblastoma, and central nervous system tumors. Cribriform-morular variant (CMV) is a rare subtype of papillary thyroid carcinoma (PTC) that is associated with FAP, and is also seen in patients without FAP. Patients could present with PTC before they show signs and symptoms of colorectal polyps.
Case: A 49 year old woman with history of duodenal and colon polyps with suspicion of FAP was found to have an incidental thyroid nodule on computed tomography. Her symptoms included weight loss and dry skin. The patient reported a history of colon cancer in her paternal great grandmother and daughter. Her maternal grandmother had a goiter. She denied any radiation exposure. On physical exam she had a palpable 2-cm rounded thyroid nodule. Thyroid function tests were within normal limits. Thyroid ultrasound showed a 2-cm heterogeneous nodule which was avascular. A subsequent fine needle biopsy revealed papillary carcinoma. A total thyroidectomy was performed and histology confirmed moderately

differentiated papillary thyroid cancer, cribriform morular variant. The patient received adjunct radioactive iodine ablation and was subsequently started on suppressive levothyroxine doses.
Discussion: Cribriform-morular variant of papillary thyroid carcinoma is an uncommon variant known to be associated with FAP. In patients not previously diagnosed with FAP, the finding of CMV should raise the suspicion for further evaluation of FAP. After the diagnosis is confirmed, family members should undergo evaluation and genetic counseling. Screening for colorectal cancer should be considered. This case highlights the fact that CMV should raise a concern for FAP.

IN VITRO CHEMOTHERAPY PROFILING OF WELL-DIFFERENTIATED MIDGUT NEUROENDOCRINE TUMORS (NETS) BASED ON INDIVIDUAL PATIENT TUMOR BIOMARKERS ANALYSIS.
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Background: Midgut neuroendocrine tumors (NETs) are rare malignancies with indolent clinical courses. In general, they are well-differentiated with most tumor cells in the G0 phase of the cell cycle, consistent with the poor response rate of NETs to chemotherapy in vivo. We hypothesize that insults, such as surgery, can drive NET cells from G0 into S phase and that biomarker analysis of individual patient tumors harvested and grown in the lab will provide useful practical guide for future intra and post-operative adjuvant therapy.
Methods: 97 well-differentiated midgut NET patients underwent cytoreductive surgery at our institution between May/2012 and October/2012. 148 surgical specimens were collected and submitted to a single commercial lab for processing. Primary tumors, lymph nodes and liver metastases were harvested and cultured. Their ribonucleic acids (RNA) were then extracted to analyze the expressivity, a total of 88 different biomarkers. Based on our patients' specific tumor biomarker expressivity and known correlations between 36 anti-neoplastic agents with their linked biomarkers, recommendations were reported as clinically beneficial or non-beneficial.
Results: A total of 148 specimens from 97 patients were tested. In four of the 97 patients, no clinically beneficial chemotherapy agent could be identified. Among the remaining 93 patients, the top three agents that are most likely to be clinically beneficial are: fluorouracil, cisplatin and carboplatin. These were reported to be clinically beneficial in 135/148 (91.2%), 103/148 (69.6%), and 103/148 (69.6%) patients respectively.
Conclusions: Midgut NETs are slow growing tumors which are chemotherapeutically inert owing to the fact that most of the tumor cells are in G0 cell cycle. Surgical insult drives NET cells into active synthetic phase where they begin to express biomarkers specific to their tumor cells. Analysis of these biomarkers guides further potential beneficial therapy based on the current known associations among biomarkers and chemotherapy agents. These results must then be compared and confirmed against a direct in-vitro chemo sensitivity assessment conducted simultaneously on the same patients.

NEVER SEEMS TO GROW PAINS: A CASE OF SUSPECTED PSEUDOSEPTIC ARTHRITIS
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Introduction: Pseudoseptic arthritis is an acute inflammatory arthritis found in association with a sterile synovial fluid culture despite white blood cell (WBC) counts >100,000 and >75% polymorph neutrophils. This arthritis occurs most frequently in patients with underlying inflammatory or immune disorders. Early distinction from true septic arthritis can decrease the need for unnecessary antibiotics and improve patient outcomes.
Description: A 47-year-old man with a past medical history of common variable immunodeficiency (CVID) presented to the emergency department with acute onset of painful swelling to his right elbow. The patient carried a diagnosis of recurrent septic arthritis due to a history of multiple episodes of large joint swelling with accompanying fevers. Although an organism was never isolated from his prior synovial fluid analysis, he received prolonged courses of antibiotics with each occurrence. On initial presentation, he was found to have a temperature of 101.7 °F with significant right elbow erythema and edema. Plain radiography did not reveal any obvious fracture and complete blood count with differential was normal. Arthrocentesis revealed a WBC count >800,000 with 92% segs. He was placed on ceftaroline for methicillin staph aureus (MRSA) coverage and azithromycin for possible Mycoplasma or Ureaplasma, which can be potential complications in CVID. Despite antibiotics he continued to spike fevers and was subsequently taken to the operating room for surgical drainage. Additional labs including anti-nuclear antibody (ANA), anti-cyclic citrunillated peptide (CCP), radiofrequency ablation (RF), and blood cultures were unremarkable. Synovial fluid analysis was negative for bacterial, fungal and AFB cultures as well as crystals. Further testing for N. gonorrhea, Mycoplasma, and Ureaplasma via polymerase chain reaction (PCR) was also negative. A trial of high dose naproxen was started for possible pseudoseptic arthritis. Two days later his fevers

and leukocytosis fully resolved.
Discussion: Pseudoseptic arthritis is a diagnosis of exclusion as it closely resembles septic arthritis and other inflammatory joint disorders. Negative cultures with marked leukocytosis on synovial fluid analysis in an immunocompromised patient may point to a diagnosis of pseudoseptic arthritis. The mainstay of treatment includes oral therapy with either non-steroidal anti-inflammatories (NSAIDs) or prednisone.

EARLY CONTINUOUS VENOVENOUS HEMODIAFILTRATION IN PREVENTING PERMANENT KIDNEY INJURY IN SEVERE RHABDOMYOLYSIS

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Introduction: Acute kidney injury (AKI) associated with increased pigment load in rhabdomyolysis can often lead to irreversible kidney damage. Traditional means of pigment removal are often insufficient. Recent trends have shown the use of continuous venovenous hemodiafiltration (CVVHDF) with a high-flux dialyzer in severe cases of rhabdomyolysis can lessen these irreversible effects. However, the optimal timing of CVVHDF initiation, as well as its efficacy, is still controversial. We present a case of severe rhabdomyolysis admitted to our ICU where early CVVHDF decreased irreversible kidney injury in the patient.
Case: A previously healthy 37-year-old woman with no significant past medical history presented to our hospital complaining of bilateral lower extremity pain that began earlier that day. On examination, the patient had weak, cool lower extremities. In addition, the patient had no sensation and no palpable pulses in her lower extremities. The patient was found to have acute bilateral common femoral thromboemboli, which required fasciotomy and ultimately, a right above the knee amputation. On labs, the patient had an anion gap metabolic acidosis with anion gap of 24. Serum creatinine kinase and myoglobin were 2,331,300 U/L and 152,414 ng/mL, respectively. The patient was oliguric with a urine output of < 0.5ml/kg.hr and a peak serum creatinine of 1.8 mg/dL (GFR 41 mL/min/1.73). Due to the high pigment load and lack of response to volume resuscitation, the patient was dialyzed with CVVHDF in an attempt to preserve kidney function. The patient was weaned off dialysis, and at discharge, the patient's creatinine was 1.4 mg/dL (GFR of 54 mL/min/1.73).
Discussion: Our case adds to the theory that early CVVHDF can help preserve vital kidney function over traditional dialysis due to its ability to clear myoglobin more effectively. Therefore, CVVHDF should be considered in patients with AKI secondary to severe rhabdomyolysis. Further larger studies are needed to determine additional benefits, common complications, and contraindications to CVVHDF in AKI secondary to severe rhabdomyolysis.

NON-CELIAC SPRUE: A CASE OF OLMESARTAN-INDUCED ENTEROPATHY

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Introduction: Diarrhea, weight loss and villous atrophy is usually associated with the autoimmune disease celiac sprue, which is generally diagnosed by testing for tissue transglutaminase (tTG) or endomysial antibodies. In patients with negative serologies, however, other causes of villous atrophy must be investigated, including infection, irritable bowel disease, intestinal neoplasms and drug-induced enteropathy.
Case: A 49-year-old woman with a history of hypertension presented with severe non-bloody diarrhea requiring admission to the intensive care unit (ICU). She denied abdominal pain or fever, stating that over the previous four months she had unintentionally lost 25 lbs and had as many as 10 watery stools per day, unresponsive to diet modifications and loperamide. Colonoscopy and esophagogastroduodenoscopy (EGD) were negative for evidence of inflammatory bowel disease but biopsies revealed celiac-like blunting, villous atrophy and chronic inflammatory cells within the duodenal lamina propria. Serologic testing for tTG IgA, anti-endomysial and anti-gliadin antibodies, however, was negative, ruling out celiac disease. Workup for infection including C. difficile, giardiasis, parasites, HIV, hepatitis, histoplasmosis, cryptosporidium and cyto-megalovirus (CMV) was also negative. Abdominal imaging was non-diagnostic, as was a gastrointestinal neoplastic workup. Chart review revealed daily use of the anti-hypertensive olmesartan for many years. Literature search produced a number of recent reports of sprue-like illness and villous atrophy linked to this medication. Given our patients extensive negative workup, a diagnosis of olmesartan-induced enteropathy was made. After discontinuing the medication, her symptoms gradually improved, with complete resolution in three weeks. Repeat duodenal biopsy at a three month follow-up demonstrated histologic improvement and she remained symptom free.
Discussion: Olmesartan, an angiotensin II receptor blocker (ARB) approved by the FDA in 2002, is the only ARB associated with the development of villous atrophy. Given the increasing number of olmesartan-induced enteropathy case reports since 2012, the FDA elected to make a label change in July 2013 stating: "olmesartan has been associated with severe, chronic diarrhea and weight loss, with evidence of villous atrophy, with use over months to years".

"BABY, BABY I'VE GOT HEADACHE"

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Case: A 26-year-old woman with no prior medical history presented post-partum with altered mental status. She had no complications during pregnancy and had a spontaneous vaginal delivery at term one week prior. On post-partum day five, she began complaining of headaches, initially responsive to ibuprofen but eventually worsened with no relief. On the evening of admission, her boyfriend noted strange behavior and movements consistent with a tonic-clonic seizure. On the way to the hospital, she had two more similar seizures witnessed by emergency medical serevices (EMS). EMS reported her blood pressures in route to be 200/100s. She was given 5 mg of magnesium by EMS due to concern for post-partum eclampsia. Upon arrival at the emergency room, she was somnolent but arousable although unable to answer any questions. She was mildly tachycardic at 106 beats per minute and had a temperature of 38.2°C. Her blood pressure was elevated at 165/95 mm Hg. On exam, dried blood was noted on her lips and her tongue was swollen. On auscultation, she was tachycardic with clear lung sounds. Her abdomen was soft and non-tender and there was no vaginal bleeding or other discharge. Laboratory values revealed a sodium of 142, potassium of 3.3, chloride of 110, bicarbonate of 16, creatinine of 1.1, magnesium of 3.9, and white blood cell count of 12.3 $x10^3/mm^3$ with 88% neutrophils and no bands. A toxicology panel was negative for opiates, benzodiazepines, or other illicit drugs. Urine was remarkable for large blood, 448 red blood cells, protein, moderate leukocyte esterase, and 73 white blood cells. Chest x-ray and CT scan of the head were both normal. She was admitted to the medical intensive care unit for close monitoring, neurological checks, and continued magnesium administration. By hospital day two, her mental status had improved significantly.
Discussion: Pre-eclampsia is the new diagnosis of hypertension or end-organ damage in a previously healthy pregnant woman at 20 weeks of gestation or later. Eclampsia is the presence of seizures or coma in a neurologically-normal pregnant or post-partum woman. Eclampsia can be associated with severe outcomes, including cerebrovascular disease, peripartum cardiomyopathy, amniotic fluid embolus, and venous thromboembolic disease. An estimated one-third to one-half of all eclampsia cases are now post-partum, and most of those are classified as 'late post-partum,' between 48 hours and six weeks after delivery, often after a patient has left the hospital.

AND YOU THOUGHT HORMONES WERE THE PROBLEM IN PREGNANCY

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Case: A 20-year-old woman, G2P1, presented to the labor and delivery triage with right flank pain and emesis of sudden onset without any precipitating factors. The patient denied history of trauma, anticoagulant therapy, or hypertension. At the time of admission, the patient was in severe pain, was afebrile, had a blood pressure of 139/79, and heart rate of 96. Abdominal exam revealed no tenderness to palpation without guarding or rebound. Musculoskeletal tenderness was elicited from infra-scapular region to the sacroiliac joint on the right side. Mild right costovertebral tenderness was noted. Her cervix was dilated 3cm, effaced 50 percent, with fetal station at -3, unchanged from previous visit. Fetal monitor tracing was reassuring and obstetric ultrasonogram at 22 weeks showed normal fetal anatomy. Magnetic resonance imaging (MRI) revealed T2 hyperintense signal involving and surrounding the right adrenal gland suggesting infarct.
Discussion: Pregnancy is a hypercoagulable state, and the unique vascular anatomy of the adrenal glands makes them susceptible to venous thromboembolism. The resultant stasis of blood leads to hemorrhage and eventual tissue necrosis. This combination of pathophysiology can result in negative clinical consequences for mother and child in the prenatal period, during delivery, and onto postpartum. Adrenal infarction can occur in an otherwise normal pregnancy and may lead to severe complications. Providers must have a high clinical suspicion with typical presenting symptoms, such as flank pain and emesis.

FLIGHT ASSOCIATED DISSECTION

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Introduction: "Economy Class Stroke "is a term recognized in the literature pertaining to paradoxical strokes of patent foramen ovale. However, other central nervous system (CNS) processes should be considered with long distance fights. We present two cases of vascular dissection associated with long distance flights.
Case 1: A 25-year-old man recently on an economy class plane flight from Brazil acknowledged being uncomfortable during the flight. Several days after his flight he had an acute onset of right sided headache, left sided weakness, and facial

droop. He was brought to an emergency room where initial computed tomography (CT) scan of his head was negative. His deficits continued to worsen and follow up MRI showed a right sided middle cerebral artery (MCA) infarct. Computed tomography angiogram (CTA) of his neck showed acute occlusion of the internal carotid at the petrus portion consistent with dissection. The patient was started on antiplatelet therapy and improved with little deficits remaining. He was eventually discharged on aspirin and returned to Brazil.

Case 2: A 61-year-old man with past medical history of diabetes, hypertension, and hyperlipidemia had taken a flight to Iran three weeks earlier. When he landed he began to have tinnitus. An MRI done in Iran was reportedly normal. One week after returning home he had sudden weakness in left upper and lower extremities, with slurring of his speech. He presented to the emergency room where an initial CT scan was negative for stroke. The patient was admitted for monitoring where he continued to deteriorate. MRI of the head showed acute medullary infarction. Magnetic Resonance Angiogram (MRA) showed occlusion of right vertebral and right posterior inferior cerebellar arteries, consistent with dissection. The patient was placed on antiplatelet therapy and had continued hemiplegia.

Discussion: Arterial dissections are not typically associated with acute changes in atmospheric pressure, as in flight. However with rapid descent there are changes in vascular diameter and flow. This can cause increased sheering forces leading to dissection. CNS vascular dissection should be considered in any patient with recent long distance travel with manipulated neck position, such as economy class plane flight.

"I AM A KID AT HEART."

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Introduction: Ewing's sarcoma is a rare, malignant bone tumor that occurs in children/young adults, and is known as the "small, round, blue cell tumor." The infrequency makes it a challenging diagnosis, especially when the typical patient characteristics are bypassed for decades.

Case: A 61-year-old man came to the ER complaining of intermittent left-sided testicular swelling for one week. A scrotal ultrasound showed mild hydroceles and the patient was discharged 11 days later. The patient returned to the ER complaining of ongoing nausea/vomiting, and suprapubic pain radiating to left flank. Labs included urinalysis with protein and 3+ ketones, and increased creatinine at 1.5. CT renal stone study demonstrated a 10.2x7.8cm mass in the left hemipelvis with a mass-effect on the urinary bladder and displacement of the left ureter, causing left hydroureter and hydronephrosis; no osteolytic lesions were seen. The patient was admitted for intravenous fluids and anti-emetics, and the interventional radiology department was consulted for a biopsy. Differential diagnoses of the left hemipelvic mass included prostate adenocarcinoma, desmoid, carcinoid, sarcoma tumors. His creatinine did not improve and remained stable at 1.5 despite aggressive intravenous fluid administration. The patient was discharged with a follow-up visit three weeks later when the diagnosis of Ewing's sarcoma was made (biopsy returned with EWSR1-FLI1 fusion present). The patient was referred to the general surgery and oncology departments, and subsequently was set up for neoadjuvant chemotherapy followed by surgical resection. During the follow-up visit, it was explained to the patient that Ewing's sarcoma is usually seen in children/young adults; the patient went on to say, "I am a kid at heart."

Discussion: This case illustrates the atypical patient characteristics of a patient diagnosed with Ewing's sarcoma. The tumor in this case was extra osseous, found in an elderly patient, and there was no evidence of lytic bony lesions on initial imaging. If the diagnosis of Ewing's sarcoma is made promptly, the patient has a high chance of survival (5-year survival for localized disease is 70-80% post-chemotherapy).

MACROBID INDUCED HEPATITIS

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Introduction: More than 900 drugs, toxins and herbs have been reported to cause liver injury. Drugs account for 20-40 percent of all instances of fulminant hepatic failure.

Case: A 59 year old woman with a history of gout, hypertension (HTN), left-sided cerebrovascular accident (CVA) and chronic kidney disease (CKD) presented to the emergency department with a dry, generalized, macular, pruritic rash involving face, back, upper and lower extremities that started two days prior and one hour after eating tomatoes. Home medications included clopidrogel, amlodipine, clonidine, lisinopril/HCTZ, atorvastatin, metoprolol and allopurinol which was started one month prior. At presentation, her temperature was 39.5oC. Findings on urinalysis were consistent with a urinary tract infection. Complete blood count (CBC) showed leukocytosis of 12.6. Her blood urea nitrogen (BUN) was 27 and creatinine was 1.66 which was elevated from the patient's baseline. She was discharged home with a five day course of prednisone for her rash and 10 day course of nitrofurantoin for her urinary tract infection (UTI). She returned to the

emergency department four days later complaining of generalized weakness, poor appetite, nausea, watery diarrhea and fever. On exam, she was febrile with a temperature of 39.4oC. The dry macular scaly rash was still present but improving over her face. There was scleral icterus, and her abdomen was soft and nontender. CBC revealed WBC: 11.3, Hgb/Hct: 10.1/32.7, platelets: 103, neutrophils: 46%, lymph: 36%, eosinophils: 10%, PT/INR: 20.2/1.74, PTT: 39.4, BUN: 34, Creatinine: 1.31, AST: 1558, ALT: 2884, ALP: 242, Total bili: 2.1, direct bili: 1.4, albumin: 2.4. MELD=21. Her nitrofurantoin, allopurinol and atorvastatin were held for suspected nitrofurantoin- induced hepatotoxicity. She was managed with supportive care. Urine culture grew Enterococcus faecalis sensitive to ampicillin. She received three day course of intravenous ampicillin. Blood cultures remained negative. Her nausea, generalized weakness, rash and diarrhea resolved. Acute hepatitis panel, anti-mitochondrial Ab and ANCA were negative, however her anti smooth muscle Ab was positive but considered a nonspecific elevation in the presence of acute inflammation. AST/ALT decreased and she was discharged home with close follow up in clinic and repeat anti smooth muscle Ab level.

Discussion: Worldwide, the annual incidence of drug induced liver disease is estimated to be 13.9-24 cases per 100,000 persons. Risk factors are age and female sex. An estimated 70 percent of cases are caused by prescription medications. The major classes of implicated drugs include antibiotics, CNS agents (phenytoin, valproic acid) and lipid lowering agents. Patients may present with elevated markers of liver function without jaundice and may be asymptomatic or have nausea and fatigue. The diagnosis is further supported when symptoms and elevated liver enzymes resolve after drug withdrawal.

RITUXIMAB: THE DRUG THAT NEVER FAILS TO SURPRISE!

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Introduction: Granulomatosis with polyangiitis (GPA), previously known as Wegener's Granulomatosis, is a multi-organ system disease characterized by inflammation in small- and medium-sized blood vessels. The classic triad involves sinusitis, necrotizing and cavitary lung lesions and renal involvement.

Case: A 23-year-old man presented with complaints of fever, rash, sinus congestion and joint pains over the prior year. He received multiple courses of antibiotics, antihistamines and steroids at various hospitals with mild improvement. His symptoms worsened significantly over the month prior to admission with new onset of malaise, fatigue and dry cough. On physical examination vitals were BP=148/89, HR= 98, RR=18, temp=97.4. Significant findings were a 1x1 cm ulcer with granulation tissue on the posterior aspect of hard palate, petechial rash involving bilateral legs and flank with a few hemorrhagic bullae. Chest auscultation revealed crackles and rhonchi in all lung fields. Bilateral knee and ankle joints were swollen and tender. Laboratory investigation revealed leukocytosis with neutrophil predominance and anemia. Chemistries were unremarkable except for hypoalbuminemia. Urine analysis was positive for protein, glucose and blood. Infectious workup was negative. Rheumatoid factor and c-ANCA were positive. Computed tomography chest revealed bilateral reticulonodular opacities. Skin biopsy revealed leukocytoclastic vasculitis. Renal biopsy showed pauci-immune necrotizing glomerulonephritis with cellular crescents. GPA was diagnosed and he was treated with high dose steroids and Rituximab.

Discussion: Traditionally, treatment of GPA includes high dose steroids and immunosuppressive therapy with cyclophosphamide as the agent of choice for moderate disease severity. Recent trials have shown rituximab to be noninferior to cyclophosphamide when used as induction therapy. It is useful as an alternate to cyclophosphamide in select patient groups to avoid gonadal toxicity. Rituximab led to complete remission in this patient. Rituximab, by causing B-cell depletion, appears to be a targeted and effective immunotherapy in several autoimmune disorders. This case also illustrates the importance of considering a broad differential including GPA, for otherwise unexplained chronic upper respiratory symptoms not responding to conventional therapy.

OSTEOMYELITIS OF THE HUMERUS CAUSED BY PROPIONIBACTERIUM ACNES

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Introduction: Propionibacterium acnes is a fastidious slow-growing anaerobic gram-positive bacillus best known for causing acne. However, it only occasionally has been isolated from invasive infections. In that setting, slow growth and low virulence may lead to indolent presentations and diagnostic delays as illustrated by the following case.

Case: A 79-year-old man with diet-controlled diabetes underwent open reduction and internal fixation of a left humerus fracture following a motor vehicle collision. Three months later he had continued pain and immobility of the left arm, and roentgenograms showed nonunion of the humerus. One year later he presented with persistent pain and immobility. Physical examination revealed normal temperature, atrophic left deltoid muscle, healed surgical scar, and no warmth or other signs of inflammation. Left humerus x-ray showed nonunion of the mid-shaft, osteolysis adjacent to the distal

intramedullary rod, and loosening of a distal metallic screw. At surgical exploration purulence was found in bone and soft tissue, all old hardware was removed, and an antibiotic coated intramedullary nail was placed. Gram stain showed a few white blood cells but no organisms. Empiric therapy with intravenous vancomycin and oral rifampin was started, and on the fifth post-operative day all three intraoperative cultures grew P. acnes as the sole organism. Arrangements were made to continue vancomycin and rifampin as an outpatient.
Discussion: Proprionibacterium acnes is an uncommon cause of osteomyelitis and prosthetic joint infection. However, it has been associated with prosthetic infections of the shoulder more commonly than with hip or knee infections. Multiple cultures taken at the time of surgery yielded only P. acnes strongly supporting its pathogenic role in our patient. Culture identification took five days indicating that prolonged incubation may be needed. Thus, our patient had an indolent and slowly progressive P. acnes prosthetic shoulder infection that led to a delay in diagnosis and clinical progression of his infection.

HASHIMOTO'S ENCEPHALOPATHY AS A RARE MANIFESTATION OF HYPOTHYROIDISM
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Introduction: Hashimoto's Encephalopathy (HE) is a rare syndrome of steroid-responsive encephalopathy associated with elevated serum antithyroid antibody concentrations. The presentation of HE is highly variable making it difficult to recognize.
Case: A 75-year-old woman without prior history of psychiatric illness or dementia presented with a four week duration of worsening cognitive decline associated with confusion, agitation, inappropriate behavior, hallucinations (auditory and visual), tremors (action and postural) and gait disturbance. She was admitted to an acute psychiatric unit. Electroencephalogram (EEG) and brain imaging included computed tomography and magnetic resonance imaging (CT, MRI) were unremarkable. Lumbar puncture of cerebral spinal fluid (CSF) showed WBC 7, glucose 71, protein 45 and negative culture. The neurology department considered the diagnosis of paraneoplastic syndrome as CT imaging revealed hypoattenuation in the body of the pancreas concerning for neoplasm. At the time of transfer to our facility, her vital signs were normal and other than her psychosis and gait disturbance, physical exam was unremarkable. Repeat MRI and EEG were negative. A paraneoplastic panel was negative. The gastroenterology department performed an endoscopic ultrasound, which revealed only a benign-appearing cystic lesion. Laboratory studies showed TSH 8.76, free T4 0.94, thyroperoxidase antibody (TPOAb) titer of 261.7 and thyroglobulin antibody (TgAb) screen of 9.7. We considered the diagnosis of HE given her presentation along with elevated TPOAb and TgAb. She was treated with steroids with moderate improvement but incomplete resolution of symptoms. A brief trial of oral free T3 was administered due to concern of decreased peripheral conversion from T4 to T3 but she did not respond to this. She was eventually discharged with levothyroxine along with olanzapine and divalproex per the psychiatric department to mitigate psychosis.
Discussion: HE is a rare but under-recognized cause of encephalopathy. Although our patient had the essential features of elevated antithyroid antibody concentrations, common presenting symptoms and a response to steroids, her age of onset was later than most individuals with the condition. She had a suboptimal response to steroids and required antipsychotics. This case extends the spectrum of the diversity of HE and the importance of considering HE in well-functioning elderly patients who present with confusion.

THE ACHES THAT TAKE YOUR BREATH (AND TEARS) AWAY
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Case: An 80-year-old man presented with a complaint of three months of fatigue and aching of his shoulders and hips, as well as pain, swelling, and stiffness in bilateral fingers that was worse in the morning but improved with movement. Associated symptoms included worsening dry mouth and eyes, dysphagia, exertional dyspnea, and right foot drop. Physical exam was significant for edematous and tender bilateral proximal interphalangeal joints, metacarpophalangeal joints and wrists with decreased grip, extension and flexion, as well as bilateral pulmonary crackles. Laboratory analysis revealed Anti-Ro (SSA) and Anti-La (SSB) positivity with elevated erythrocyte sedimentation rate (70mm/hr) and C-reactive peptide (13mg/L). Pulmonary function testing was notable for a forced vital capacity (FVC) of 64% and carbon monoxide diffusing capacity (DLCO) of 44%. High resolution chest computed tomography demonstrated fibrotic changes consistent with non-specific interstitial pneumonitis. The patient was started on mycophenolate mofetil, hydroxychloroquine, and prednisone for Sjögren's syndrome (SjS). Symptoms improved and repeat FVC revealed a 20 percent improvement, however subsequent tapering of prednisone resulted in worsening dyspnea and increase of FVC to 60 prcent. Prednisone was restarted and

rituximab 2g divided in two doses was administered with overall symptom improvement. Symptoms and FVC continued to wax and wane over the following 18 months requiring re-dosing of rituximab with most recent FVC improved to 71 percent and DLCO 41 percent.
Discussion: SjS is a connective tissue disease (CTD) of unknown etiology characterized by lymphocytic infiltration of several organ systems. Though the quintessential presentation is with decreased salivary and lacrimal gland function, common manifestations of SjS include arthritis, neuropathy, and interstitial lung disease (ILD). While reported rates of lung involvement in SjS vary widely (9-75%) the development of ILD in SjS has been associated with worse survival. ILD can be difficult to manage in patients with CTD such as SjS, as it is often progressive with a paucity of data on therapeutic options. ILD in CTDs such as SjS carry a high burden of morbidity, however early recognition and appropriate treatment, including novel therapies such as rituximab, may impact survival and reduce symptoms.

LACTIC ACIDOSIS: A RARE MANIFESTATION OF SYNTHETIC MARIJUANA INTOXICATION.
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Introduction: Synthetic cannabinoids are designer drugs that mimic the effect of cannabis, which has become popular with young drug users. These drugs have a similar chemical structure and pharmacologic effects as marijuana, but seem to be more potent. These substances have been banned by the US Drug Enforcement Agency in 2010. Prior to 2010, these drugs were perceived as "safer" by the general population. Synthetic cannabinoids cause effects similar to marijuana making the subjects euphoric. However, they act as full, rather than partial, agonist at the receptor sites causing more severe side effects such as severe agitation, seizures, acute renal failure, and lactic acidosis.
Case: An 18 year old man was brought to the emergency department after his friends found him unconscious at home. He was found to be lethargic with shallow and rapid breathing. The patient had metabolic acidosis with an anion gap of 26 and lactic acid levels were high at 10.6. He also had a generalized tonic clonic type seizure after admission however lactic acid levels were drawn before the seizure occurred. Urine drug screen was negative; blood alcohol did not show high levels of alcohol. The patient was intubated, mechanically ventilated and, started on a bicarbonate drip. After the patient was extubated, a thorough history was significant for synthetic marijuana use only.
Discussion: Limited literature with few reported cases of lactic acidosis exist, and none to the degree we saw in our patient. Even though synthetic cannabinoids were added to schedule I controlled substance they are still sold legally as incense herbal products with package insert saying not for human consumption. At present, detection test are not readily available for rapid identification, and the literature on treating these patients is thin. Synthetic cannabinoid use should be kept in the differential during management of young patients who present with seizures and lactic acidosis. Further research is needed to identify rapid identification test and good treatment protocols for improved patient therapy.

MASSIVE PULMONARY EMBOLISM: A RARE PRESENTATION OF ACUTE HIV-1 INFECTION
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Introduction: Acute HIV infection rarely presents as venous thromboembolism as evidenced by a paucity of medical literature. HIV predisposes to hypercoagulability by a number of pathways.

Case: An 18-year-old man with scalp psoriasis (initiated on adalimumab two weeks prior) presented to the emergency department complaining of dyspnea on exertion, pleuritic chest pain, and left leg pain for two weeks. Review of major systems also revealed one month of subjective fevers, malaise, and headaches. His vital signs revealed mild hypoxemia and tachycardia. An activated partial thromboplastin time (aPTT) was prolonged at 58 seconds and his platelets were decreased at 100,000/ul. Lower extremity compressive venous ultrasonography revealed acute deep venous thrombosis (DVT) of the left popliteal vein and computed-tomography (CT) angiogram of the chest revealed extensive bilateral pulmonary emboli and a large saddle embolus, pulmonary infarction, and hepatosplenomegaly. Selective pulmonary angiography with targeted thrombolysis confirmed bilateral pulmonary artery emboli. His hospitalization was complicated by progressive severe thrombocytopenia and fever with rigors. His social history revealed he had experienced his first unprotected sexual encounter with a man one month prior to symptoms. HIV antibodies were positive and a quantitative viral load revealed 4 million copies per ml and a CD4+ lymphocyte count of 534 cells per ml. Assays for anti-cardiolipin antibodies and β -2-glycoprotein antibodies were positive. Given suspicion for anti-phospholipid syndrome and heparin-induced thrombotic thrombocytopenia, dose-adjusted bivalirudin was substituted for heparin as a bridge to warfarin. Anti-retroviral therapy (ART) and intravenous immunoglobulin were also initiated for HIV associated thrombocytopenia. His platelets improved and were stable on discharge. The patient was compliant with ART and coumadin at follow up with normal complete

blood counts and a marked reduction in viral load.
Discussion: HIV infection has been associated with syndromes of thrombosis and thrombocytopenia including acquired coagulation factor abnormalities, the presence of anti-phospholipid antibodies, heparin-induced thrombocytopenia, and thrombotic thrombocytopenic-hemolytic uremic syndrome. These syndromes are associated more commonly with advanced HIV infection and AIDS. Thrombosis and thrombocytopenia are a rare complication of early HIV infection possibly due to intense viremia and inflammation. HIV screening should be considered at all patient encounters and initiation of adalimumab therapy.

A CLEAR CASE OF MRSA SEPSIS, OF AN UNEXPECTED ORIGIN
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Case: A 56-year-old man with a history of uncontrolled type 2 diabetes mellitus, benign prostatic hypertrophy and history of recent knee and elbow abscess presented to the emergency department with nausea, vomiting, and fevers. Two days prior, he presented to the ER and was diagnosed with acute presumed prostatitis and urinary retention. He was discharged on ciprofloxacin and an indwelling Foley catheter with urology follow-up. After being unable to tolerate oral medications, he presented again to the emergency department, at which time, he was febrile and tachycardic. Physical exam was benign except for a boggy and tender prostate and bilateral CVA tenderness. Labs demonstrated leukocytosis, elevated HbA1C, and pyuria on urinalysis. Urine cultures collected at the patient's earlier emergency department visit demonstrated no growth. Computed tomography indicated an enlarged prostate with patchy areas of low density. He was admitted with sepsis secondary to prostatitis. Blood cultures on day one showed gram-positive cocci , methicillin resistant staph aureus (MRSA isolate) and persistent bacteremia for three days despite therapy with vancomycin. After adequate dosing of vancomycin, sterilization of the blood was achieved, yet urine culture demonstrated growth of MRSA. Transthoracic rchocardiogram (TTE) showed no signs of endocarditis with good visualization of valves. He was successfully treated with 14 days of vancomycin.
Discussion: Prostatitis is an infection commonly associated with overgrowth of gram-negative bacteria that normally colonize the urinary tract. Rarely, gram-positive organisms such as Staphylococcus aureus have been implicated. Few cases of MRSA prostatic abscess have been described in the literature. However, community-acquired MRSA prostatitis, in the absence of prostatic abscess, is exceedingly rare. Some risk factors urogenital MRSA infection include uncontrolled diabetes, HIV, chronic catheters and/or intravenous drug abuse. Often a recent skin or soft tissue infection, abscess or pneumonia involving MRSA is frequently reported. Our patient had poorly controlled diabetes mellitus and in the setting of an abscess, persistent bacteremia, and urine culture growing MRSA after treatment, the diagnosis of community-acquired prostatitis was supported.

FOOD FOR THOUGHT: MITRAL STENOSIS WITH A SIDE OF MAC AND CHEESE.
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Introduction: Caseous mitral annular calcification (CMAC) is a rare variant of mitral annular calcification (MAC), most commonly seen in elderly women on the posterior mitral annulus. CMAC is usually diagnosed incidentally and has a benign course. However, it may cause abnormal blood flow across the mitral valve resulting in mitral regurgitation, and rarely, functional mitral stenosis. MAC occurs in 10 percent of the population, while CMAC occurs in 0.06 percent. Most cases of CMAC are misdiagnosed as other intracardiac masses, such as tumors, abscesses, thrombi, and vegetation.
Case: A 73-year-old woman with a past medical history of asthma, type 2 diabetes mellitus, and hyperlipidemia, presented with dyspnea on exertion, chest discomfort, and intermittent palpitations for a few months. Cardiovascular exam was remarkable for a II/VI decrescendo diastolic murmur and III/VI systolic murmur best heard at the left 4th intercostal space. Transthoracic echocardiogram showed a 2.0 x 2.2cm hyperechoic structure on the ventricular side of the posterior mitral valve annulus, impinging on the mitral valve. Acoustic properties were consistent with CMAC. A mean mitral valve gradient of 14 mmHg and a systolic pulmonary artery pressure greater than 62mmHg were representative of severe functional mitral stenosis. A beta-blocker was initiated to blunt exertional symptoms due to decreased diastolic filling time. A right and left heart catheterization revealed non-obstructive coronary artery disease. The patient was anticoagulated with warfarin for increased risk of thromboembolic events associated with mitral stenosis. She was discharged home with a cardiothoracic surgery referral.
Discussion: This case highlights the importance of including CMAC in the differential diagnosis when evaluating patients with intracardiac masses. Unlike other documented cases of CMAC, which were found incidentally, our patient had

clinically significant CMAC that produced a functional mitral stenosis, causing exertional chest discomfort and dyspnea with intermittent palpitations.

MISSING THE OBVIOUS: A CASE OF UNDIAGNOSED GRAVES' DISEASE

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Introduction: Undiagnosed hyperthyroidism has an estimated prevalence in the general population of 3.4 percent. Without adequate treatment, Graves' disease can lead to significant morbidity and result in potentially fatal conditions such as tachyarrhythmia induced heart failure or thyrotoxic crisis.

Case: A 49-year-old woman with a history of hypertension, Clostridium difficile colitis, presented with over nine years of nausea, vomiting, stabbing abdominal pain and diarrhea. During the past decade, she presented to multiple hospitals within the Gulf South, but did not receive a definitive diagnosis or relief from her symptoms. Her past history was complicated by narcotic and marijuana abuse in conjunction with homelessness, which prevented regular follow up care. Many of her complaints were attributed to marijuana abuse as she endorsed its continued use. An esophagogastroduodenoscopy (EGD) performed four months prior to admission identified reflux esophagitis. On presentation, her heart rate was 122. Physical examination was significant for a BMI of 23.8, tachycardia, fine distal tremors and mild epigastric pain. A thorough review of systems was positive for anxiety, tremulousness and chronic palpitations. Given her constellation of symptoms, thyroid function tests were obtained. A TSH was measured at <0.010 uIU/mL (normal: 0.4-4.0) with a T3 of 171 ng/dL (60-180) and a free T4 of 2.51 ng/dL (0.71-1.51). EKG identified tachycardia to 120 bpm with new T-wave inversions from V2-V5. A thyroid ultrasound revealed a heterogeneous hypervascular thyroid. Positive thyroid peroxidase (TPO) antibodies to 1355.6 IU/mL (<6.0) and TSI of 254% (<140) supported the diagnoses of Graves' disease. Following initiation of propranolol 40mg nightly, and methimazole 10 twice daily, her symptoms greatly improved.

Discussion: This case is an example of how the perpetuation of assumptions and anchoring heuristic through medical records can lead to misdiagnosis. Nausea, vomiting and diarrhea are common symptoms of hyperthyroidism and she may have had Graves' disease for nine years without a proper diagnosis and without appropriate treatment.

DELIRIUM & DECISIONS

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Case: A 64-year-old man with known peripheral vascular disease who was recently diagnosed with occlusions in his right and left superficial femoral arteries, was brought to the emergency department for progressive bilateral lower leg pain. Amputation was offered to the patient at that time, but the patient and his family opted to wait and see if he improved. Physical exam was notable for malodorous lower extremities with dry gangrene in multiple phalanges, extensive necrotic ulcerations on both anteromedial shins, without palpable peripheral pulses. Initial labs were significant for leukocytosis and an elevated troponin without accompanying ECG changes. The surgical team again recommended amputation. The patient refused, saying he thought his legs would heal on their own, and he would only want the surgery if there were no other options. On hospital day two, the patient became tachycardic. His leukocytosis worsened, his troponin increased and his mental status deteriorated. Initially, the psychiatry department deemed that he retained decision capacity, and he continued to decline the amputation. However, each day thereafter, the psychiatry department determined the patient to be delirious and without capacity to make medical decisions. The patient's sepsis persisted despite an aggressive antibiotic regimen and his mental status failed to improve. With the patient urgently needing surgery, but unable to consent for the amputation, his adult children assented for the operation on his behalf.

Discussion: Decisional capacity is the ability to consent for or refuse care. Appelbaum and Grisso describe four elements of decisional capacity:

1. The ability to communicate a choice.
2. The ability to understand the relevant information.
3. The ability to appreciate a situation and its consequences.
4. The ability to reason rationally.

Psychiatrists generally believe that clinicians overestimate patients' decisional capacity. Increased age and cognitive impairment are two risk factors for lack of capacity. Hospitalized patients with delirium should not be evaluated for decisional capacity as they do not meet the Appelbaum and Grisso criteria.

If a patient lacks decisional capacity and does not have a medical power of attorney, the clinician should then turn to the hierarchy of surrogate decision-makers defined by the state. In Louisiana, the spouse is next in line, followed by any adult

children (all must be contacted and in agreement), and lastly, parents of the patient.

STILL FEBRILE – A RARE CAUSE OF JOINT PAIN

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Case: A 35-year-old woman presented to our emergency department complaining of arthralgia, rash, fevers, and muscle weakness for the past year. These symptoms initially began as unilateral upper lip swelling, which then progressed to a facial rash and orbital swelling over two weeks with associated fevers, which eventually subsided. The patient then began having fluctuating arthralgia and muscle weakness with associated rash and subjective fevers. She had rheumatologic evaluation several months prior to our encounter at another facility, which failed to reveal an explanation for her symptoms. During this workup, antinuclear antibodies (ANA), rheumatoid factor (RF), and complement levels were normal with elevated erythrocyte sedimentary rate (ESR) and C-reactive protein (CRP). On arrival to our hospital, she complained of symmetric polyarthritis involving the ankles, knees, shoulders, and hands, and proximal upper and lower extremity weakness with difficulty rising from a seated position. On examination she was noted to have an evanescent rash on bilateral extremities and her abdomen. Cardiac exam revealed no murmurs. Laboratory testing was significant for anemia, hyperferritinemia, leukocytosis, with negative RF and ANA. Transaminitis was not present. The patient's fevers resolved and her symptoms improved during hospitalization. She was started on prednisone 60mg daily and discharged with follow up in the rheumatology clinic to initiate therapy with the IL-1 antagonist anakinra.
Discussion: Adult Still disease, characterized by spiking fevers, joint pain, and a salmon-colored evanescent rash, is a rare systemic inflammatory disorder with an estimated incidence of 1.5:1,000,000. Currently the Yamaguchi criteria is the most sensitive for diagnosis. This consists of major criteria (fever, leukocytosis, arthritis, and rash) and minor criteria (sore throat, adenopathy, hepatomegaly or splenomegaly, abnormal liver function tests, and negative rheumatoid factor and ANA). Ferritin can be elevated to a striking degree. Our patient met five of the Yamaguchi criteria. Echocardiogram did not reveal any cardiac abnormalities, and plain film radiographs did not show any erosive arthritis. Therapy with IL-1 antagonists such as anakinra are the mainstay in treatment of Adult Still's Disease, but given the side effect of immunosuppression, it is crucial to eliminate the presence of other chronic infections prior to treatment.

LIPOMATOUS HYPERTROPHY OF INTRA ATRIAL SEPTUM

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Introduction: Lipomatous hypertrophy of the intra-atrial septum (IAS) is often misdiagnosed on routine imaging as a possible intra-cardiac mass, often leading to unnecessary and invasive surgical interventions. The use of transesophageal echocardiography can help to better diagnose this condition and avoid needless invasive procedures.
Case: A 61-year-old woman presented with shortness of breath and wheezing for two weeks. She initially attributed this to seasonal allergies, but symptoms did not resolve with nebulizer treatments. She had worsening dyspnea on minimal exertion, orthopnea and paroxysmal nocturnal dyspnea. She denied any fevers, chills, nausea, and had a baseline productive cough. Cardiovascular exam was benign with a regular rate and rhythm and no murmurs appreciated. A chest x-ray showed chronic left lower lobe consolidation. The patient also underwent a transthoracic echocardiogram. There was evidence of a right atrial mass measuring approximately 2.0cm x 1.4cm well attached to the atrial septum. It was initially thought that it could be a right atrial myxoma, but other pathologies could not be eliminated. To further investigate this possible intra-cardiac mass a transesophageal echocardiogram (TEE) was performed. Findings demonstrated that the mass was lipomatous hypertrophy of the intra-atrial septum measuring 1.3cm as well as a prominent eustachian valve present at the IVC-right atrial junction. The final diagnosis was extensive hypertrophy of the atrial septum and follow-up with the cardiology department was recommended.
Discussion: This case demonstrates the importance of correctly investigating and diagnosing possible intra-cardiac masses. Lipomatous hypertrophy of the IAS is a benign collection of adipose tissue within the intra-atrial septum. It is often misdiagnosed as myxomas or other intra-cardiac masses and patients are referred directly for surgical intervention. Further investigation with TEE is an inexpensive and timely method to properly explore this cardiac pathology. Ultimately, TEE allows accurate diagnosis of Lipomatous hypertrophy and avoids unnecessary invasive surgical procedures that would otherwise not be indicated for this benign condition.

SYSTEMIC SCLEROSIS RELATED CALCINOSIS: PATIENTS PROVIDE WHAT SPECIALISTS WANT TO LEARN

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Background: Calcinosis is a disabling, rarely discussed manifestation of systemic sclerosis (SSc) for which the natural history and management is understood poorly.
Objectives: To develop a calcinosis specific patient reported outcome measure (PROM) that can be used for future clinical research to test the effects of therapy on scleroderma related calcinosis.
Methods: Patients were selected for participation by their scleroderma physicians. Four focus groups and individual interviews were recorded and transcribed verbatim. Patients were asked to frame questions to help a physician learn if calcinosis was better, worse or the same. Patient transcripts underwent an iterative inductive process (no preconceived coding, content drives coding and analysis) by at least five independent analysts including at least one research team member with SSc. Concepts were triangulated to identify a comprehensive set of meaningful concepts with occurrence quantified per participant.
Results: Twenty-three patients (22/23 female, 19/23 white, with mean disease duration 14.8 years) consented and were interviewed. Responses included concepts of self-management strategies and recurrent hypotheses relating calcinosis development to trauma, Raynaud's and cold exposure. We identified discrete concepts such as the perceived association between cold exposure, Raynaud's and calcinosis severity. Calcinosis tended to present along with or soon after SSc diagnosis and remained throughout disease duration – though was not yet compared to report of first Raynaud experience.
Conclusions: Patient observations and self-management behavior provide opportunities for experts to learn from and to preemptively educate physicians and patients. Patients are eager for self-management guidance. These concepts are the groundwork for PROM development. However, patients suggested a composite of scales anchored in pain, size, frequency, number and related impairment may reasonably serve as an interim instrument for SSc calcinosis.