AGGRESSIVE INTRAVENOUS HYDRATION WAS INITIATED RESULTING IN PRESERVATION OF RENAL FUNCTION. THE CPK PEAKED AT 65,000 MG/DL BEFORE RETURNING TO NORMAL.

DISCUSSION: THE BROWN RECLUSE SPIDER IS ENDEMIC TO THE SOUTH AND SHOULD BE CONSIDERED IN INFREQUENTLY USED OR SECLUDED AREAS. A HISTORY OF EXPOSURE TO SECLUDED AREAS IS IMPORTANT IN MAKING THE DIAGNOSIS. ALTHOUGH THE MAJORITY OF BITES ARE LIMITED TO A LOCAL REACTION, TEN PERCENT OF THE CASES MAY RESULT IN A SEVERE LOCAL REACTION OR SYSTEMIC SYMPTOMS (LOUSCELISM). LOUSCELISM IS CHARACTERIZED BY FEVER, VOMITING, MYALGIA, AND HEMOLYSIS. ANuria MAY DEVELOP, BUT ACUTE RENAL FAILURE IS RARE. SEVERE SKIN NECROSIS OCCURS IN TWENTY PERCENT AND ONE PERCENT DEVELOP EXTENSIVE HEMOLYSIS. THE SPIDER BITES ARE TREATED WITH LOCAL ANESTHETICS AND DAPSONE WHILE ONLY SUPPORTIVE CARE CAN BE OFFERED FOR SYSTEMIC MANIFESTATIONS. PERSISTENCE OF GENERAL SYMPTOMS FOLLOWING A BROWN RECLUSE SPIDER BITE SHOULD PROMPT CONSIDERATION OF RHADOMYOLYSIS.

PROGRESSIVE DEBILITATING WEAKNESS IN A PREVIOUSLY ROBUST ELDERLY WOMAN. G. A. GRAN (1), R. GRAN (1). University of Pittsburgh, Pittsburgh, PA. (Tracking ID #820164)

LEARNING OBJECTIVES: 1) Recognize the presentation of myasthenia gravis (MG). 2) Diagnose MG using laboratory and clinical parameters. 3) Recognize the treatment of MG. CASE INFORMATION: Mrs. A.B. is a 74 year old female with hypertension and diabetes mellitus who presented with a nine month history of progressive weakness. She initially developed bilateral proximal arm weakness which progressed to bilateral proximal leg weakness. She sought medical attention when she was no longer able to ambulate. She denied numbness, tingling, or pain, but did admit to dysphagia with solids and liquids upon initiation of swallowing. Physical exam revealed ptosis of the left eye and intact extraocular muscles. Muscle strength in bilateral biceps/triceps was 3/5 and hip flexors were 2/5. She was unable to maintain her arms in forward abduction for greater than 10 seconds and was unable to ambulate. The remainder of the neurological exam was unremarkable. Laboratory data revealed a normal CPK,ANA,ESR, thyroid function studies, and cortisol level. EMG revealed decreasing amplitude with repetitive stimulation, a pattern consistent with MG. Acetylcholine receptor antibody levels were negative. She was treated with IV immunoglobulin and responded well. Upon discharge, she was able to ambulate with minimal assistance.

DISCUSSION: MYASTHENIA GRAVIS (MG) IS A DISEASE OF THE NEURON-MUSCLE JUNCTION DUE TO ANTIBODY-MEDIATED AUTOSOME ATTACK OF ACETYLCHELINERGIC RECEPTORS ON THE POST-SYNAPTIC SURFACE. MG CAN AFFECT ALL AGES, ALTHOUGH IT PEAKS IN WOMEN IN THEIR 20S AND 30S AND MEN IN THEIR 50S AND 60S. THE MAIN FEATURES ARE WEAKNESS AND FATIGABILITY WITH PRESERVATION OF DEEP TENDON REFLEXES. DIPLOPIA, PTOSIS, FACIAL WEAKNESS, AND DYSPHAGIA ARE COMMON. DIAGNOSIS CAN BE CONFIRMED WITH ELEDROPLASIA, AN ANTI-ACETYLCHOLINESERASE INHIBITOR OF THE BREAKDOWN OF ACETYLCHELINERGIC. IN MYASTHENIC PATIENTS, THERE IS AN IMPROVEMENT IN STRENGTH OF WEAK MUSCLES LASTING FOR APPROXIMATELY FIVE MINUTES. FURTHER TESTING WITH REPETITIVE NERVE STIMULATION WILL SHOW A REDUCTION IN THE AMPLITUDE OF THE EVOKED RESPONSES OF MORE THAN 10-15%. ANTI-ACETYLCHOLINE RECEPTOR ANTIBODY LEVELS ARE DETECTABLE IN THE SERUM OF APPROXIMATELY 80% OF ALL MYASTHENIC PATIENTS. ITS PRESENCE IS VIRTUALLY DIAGNOSTIC, BUT A NEGATIVE TEST DOES NOT EXCLUDE THE DISEASE. TREATMENT OF MG INCLUDES ANTI-CHOLINESTERASE MEDICATIONS. IN PATIENTS WITH A MYASTHENIC “CRISIS”, IV IMMUNOGLOBULIN OR PLASMAPHERESIS IS EFFECTIVE AS SHORT-TERM TREATMENT. FOR LONG-TERM MANAGEMENT, GLUCOCORTICOIDS, CYCLOSPORINE, AZATHIOPRINE, AND MYCOPHENOLATE HAVE BEEN SHOWN TO BE EFFECTIVE. CT OR MRI OF THE MEDULLA OBONNA IS THE PROBLEM OF THE THYMUS, WHICH SHOULD BE REMOVED IF FOUND. IN THE ABSENCE OF A THYMUS, THYMECTOMY IS RECOMMENDED IN PATIENTS WITH GENERALIZED MG WHO ARE BETWEEN THE AGES OF 55 AND AT LEAST 55 YEARS OLD. UP TO 85% OF PATIENTS WILL EXPERIENCE IMPROVEMENT AFTER THYMECTOMY AND 35% OF THESE PATIENTS ACHIEVE DRUG-FREE REMISSION.

AN ETHICAL DILEMMA: TREATING THE COMPLICATIONS OF INTRAVENOUS DRUG USES. S. AGRESTA (1), M. KANE (1). Tulane University, New Orleans, LA. (Tracking ID #50828)

LEARNING OBJECTIVES: 1. Discuss the ethical dilemma involved with the treatment of active intravenous drug users. CASE INFORMATION: A 44 year-old presented with progressive dyspnea, fever, and subternal tightness. He had endocarditis requiring proinrin valve replacement in 1991. He started using intravenous cocaine and heroin weekly one month prior. He had a fever of 40 C and a holosystolic murmur. Blood cultures grew streptococcus viridans. Transesophageal echocardiography revealed vegetation on the aortic valve. The patient was diagnosed with endocarditis and was started on antibiotic therapy. The patient was also referred to a substance abuse clinic for treatment.
METHODS: We surveyed all 121 directors of emergency medicine training programs in the United States to assess the frequency of asking about cocaine use, testing for cocaine, and consent for such testing when performed in patients with ACP in their emergency departments (EDs). These 1 questions were asked for 2 clinical vignettes of ACP patients who differed only by sociodemographic features. Questions used a 5 point Likert scale (very likely, somewhat likely, as likely as not, somewhat unlikely and very unlikely). 

RESULTS: 865121 (71%) program directors responded to the survey. Comparing a vignette describing a 30 y.o. executive who was 100% likely to use cocaine would be “likely” (very or somewhat likely) to occur in 41% and 95% of EDs respectively, testing for cocaine use would be “likely” to occur in 16% and 62% of EDs, yet consent for this testing would be “unlikely” (somewhat or very unlikely) to be obtained in 71% and 79% of EDs. Even after asking about cocaine use, 13% and 64% of EDs would test for in the 60 y.o. executive and 30 y.o. ex-convict vignettes respectively.

CONCLUSION: In the EDs that train America’s emergency department physicians, not all patients with ACP are asked about cocaine use, yet many are tested for cocaine use without their consent. This practice is applied differently and is according to sociodemographic characteristics of patients. Physicians could avoid a potential ethical breach and possible tangible harm to patients by asking about, but not testing for cocaine use in all competent patients with ACP in the ED.

INFLUENZA IMMUNIZATION AMONG MEDICARE BENEFICIARIES 1992 – 1996: HIGHER RATES BUT DISPARITIES PERSIST. J.P. Meanr1, S. Yu2, J. Chen2. Wake Forest University, Winston-Salem, NC; Tracking ID #50277

BACKGROUND: Annual influenza immunization reduces morbidity, mortality and acute care service utilization among high-risk groups, one of which is individuals age 65 and older.

METHODS: Data from the Medicare Current Beneficiary Surveys (1992 to 1996), a national probability sample of the Medicare population, were analyzed using robust logistic regression approach with self-reported influenza immunization as the dependent variable.

RESULTS: Data were compiled for 18,742 respondents 58% female, 87% age 75 – 84 years, and 20% age 85+, 32% reported incomes under $10,000, and 14.7% enrolled in an HMO. Likelihood of immunization steadily increased over the years from 1992 (reference), 1991 (OR = 1.07), 1994 (OR = 1.51), 1995 (OR = 1.61) and 1996 (OR = 1.89). Non-whites had lower odds of immunization OR = 0.62. Odds of reporting influenza immunization significantly increased with age (65 – 74 as reference) 75 – 84 yrs (OR = 1.44), and age 85 yrs (OR = 1.48), years of education (<9 yrs as reference), 9 – 12 years (OR = 1.27), >12 years (OR = 1.67), income ($50K as reference) $10 – 19,999 (OR = 1.22), $20 – 29,999 (OR = 1.49), $30 – 49,999 (OR = 1.68), $50 (OR = 1.94), any param. B coverage (OR = 1.2 – 1.66), or HMO enrollment (OR = 1.18) with all at p < .0001. The presence of more chronic illnesses (OR = 1.18 to .59) and less than excellent health status (OR = 1.13 to 1.52) was less likely associated with the immunization. There were no statistically significant differences in likelihood of the immunization in gender, living alone, urban/rural, ADL impairment, stroke, mental illness, Parkinson’s disease or hip fracture.

CONCLUSION: The nation-wide efforts dramatically increased annual influenza immunization rates in the Medicare population over the years 1992 – 1996. Historically underserved older adult populations with low social and economic status remained under-immunized.

PRIMARY CARE PHYSICIAN SATISFACTION WITH TRACKING ABNORMAL RESULTS AND ATTITUDES CONCERNING CLINICAL DECISION SUPPORT SYSTEMS. H.J. Mudr1, T.K. Gandhi2, A.S. Karsen3, E.A. Mott4, E.G. Poons2, S.J. Wang1, D.G. Fairchild1, D.W. Bates1. 1Division of General Internal Medicine, Brigham and Women’s Hospital, Boston, MA; 2General Medicine Unit, Massachusetts General Hospital, Boston, MA; Tracking ID #50277

BACKGROUND: One of the most frequent causes of lawsuits in outpatient is failure to follow up abnormal results. Information systems could assist providers in abnormal test result tracking, yet little is known concerning providers attitudes toward outpatient decision support. Therefore, we surveyed primary care physicians to assess satisfaction with their current systems for abnormal results tracking, as well as their attitudes concerning clinical decision support systems (CDDS).

METHODS: We surveyed 113 primary care physicians and 103 housestaff physicians affiliated with two major academic institutions in Boston. All eligible providers utilized a single electronic medical record (EMR) that did not have result tracking or CDDS. The survey instrument included questions concerning satisfaction with their current non-electronic methods for tracking abnormal results and attitudes towards CDDS. Questions were scored on a 7 point Likert scale and dichotomized with responses greater than 4 indicating agreement or satisfaction.

RESULTS: The overall response rate was 64% (1392/216). Few responses were satisfied with their current system for managing abnormal test results (Table 1). However, a high percentage agreed that CDDS assisting with these issues would be useful. Overall, 81% (105/130) agreed that they could better comply with patient care guidelines with electronic decision support (e.g. reminders).

CONCLUSION: Most primary care provider attendings and housestaff were not satisfied with their current methods for tracking abnormal test results. Our respondents believed that CDDS are useful and could improve their ability to track abnormal results and to comply with guidelines.

Table 1: Satisfaction with Tracking Test Results and Perceived Usefulness of CDDS.