Internal Medicine History and Physical

Date of Admission: 5/1/2018
Chief Complaint: Shortness of Breath for 2 days
Attending: Dr. Medicine, MD
Source: Patient, Family, Chart

HPI

Mr. Mc Smokey is a 56 year old man with past medical history significant for Chronic Respiratory Failure 2/2 COPD (FEV 60%, FEV1) on 2L NC continuous and 50 pack year tobacco use, atrial fibrillation, left ventricular systolic heart failure with reduced EF 35%, who presented to the emergency department with progressive shortness of breath for 2 days. He was feeling fatigued with fevers up to 101.4F, chills, and productive cough. He experienced increased sputum production. Now able to fill a coffee cup about 1 inch from half inch in one day. The sputum has also changed from clear to green. A day before admission, he had to turn his oxygen up to 4L because he was feeling more short of breath despite increased nebulizer frequency. He became confused and his wife brought him into the Emergency Department. Exposed to family members with a cold. He had his influenza and his pneumonia vaccines. Last COPD exacerbation was 1 year ago and did not require hospitalization. He had been stable on his home COPD medications requiring rescue inhaler 1-2 times a week. He denies chest pain, back pain, tearing sensation, hemoptysis, travel outside of Arizona, pets, bug bites, no extended car rides, no history of pulmonary embolism or deep vein thrombosis, paroxysmal nocturnal dyspnea, orthopnea, palpitations. No nausea, vomiting, abdominal pain, dysuria, hematuria, diarrhea, new rashes or joint pain, night sweats, or unexplained weight loss.

Review of Systems

GEN: + subjective fevers, + chills, + fatigue, no unexplained weight loss
HEENT: intermittent headaches, no changes in vision, no changes in hearing, nasal discharge, no sore throat
PULM: no hemoptysis,
CV: no chest pain, no palpitations, no PND, no orthopnea
ABD: no abdominal pain, no nausea, no vomiting, no constipation, no diarrhea
EXT: no lower extremity swelling, no joint pain, no joint redness
SKIN: no rash, no jaundice, no ulcers
NEURO: no changes in speech, no weakness, no numbness, no tingling

Past Medical History

Ischemic cardiomyopathy s/p LAD stents x 2 (5/2012)
Left Ventricular Heart Failure with reduced Ejection Fraction (35%)
HTN
Paroxysmal Atrial Fibrillation, on anticoagulation
Diabetes Mellitus, type 2, HbA1c 7.5%
Hyperlipidemia
Osteoarthritis
Gout

Past Surgical History

Left Knee Replacement (3/2000)
Cholecystectomy (4/2005)

Allergies
Penicillin: Rash, no anaphylaxis

Home Medications
Tiotropium 2 inhalations daily
Albuterol 90mcg, inhaled every 4-6 hr PRN SOB
Aspirin 81mg daily
Atorvastatin 40mg qHS
Lisinopril 20mg daily
Furosemide 20mg PO daily
Potassium chloride 20mgeq daily
Metoprolol ER 50mg daily
Rivaroxaban 20mg daily
Insulin Glargine 20units qHS
Insulin lispro 5U with meals
Metformin 1000mg BID
Tylenol 650mg q6hrs as needed for pain
Allopurinol 300mg daily
Omega 3 capsules 1g PO TID

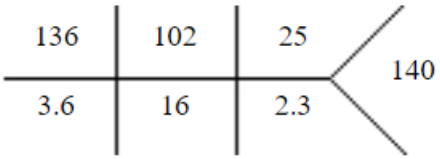
Social History
Lives with his wife in Tucson, AZ. Retired software engineer. Served in the Airforce for 15 years. Has 4 adult children who live in town and 2 dogs. Ambulates without assistance, bathes, showers, dresses, feed, and toilets independently. Takes care of the family finances. Continues to drive. He is the primary caretaker of his wife who was recently diagnosed with dementia. Sexually active, monogamous
Tobacco: cigarettes, 50 pack years
EtOH: occasionally on the weekends; 1-2 glasses of wine
Illicit drugs: no history of injection or inhalation of illicit drugs

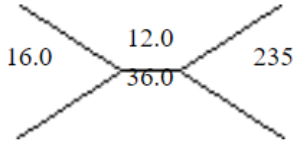
Family History
Coronary Artery Disease: mother, father, brother
Diabetes: brother and sister
Lung Cancer: Aunt
HTN: mother, father, brother, sister
Ischemic Stroke: grandfather

Physical Exam
Ht: 5'9 Weight: 220lbs BMI 32.6
T: 38.2 HR 113 BP: 160/95 RR: 25 O2 Sat: 90% on 4L Nasal Cannula

GEN: Sitting in bed, mild distress, A&OX4
HEENT: Atraumatic, normocephalic, extraocular movements intact, pupils equal round and reactive, small mobile anterior cervical lymphadenopathy, oral mucosa dry on exam, clear nasal discharge
PULM: nasal cannula, mild respiratory distress with accessory muscle use, diffuse end expiratory wheezing bilaterally in all lung fields, dullness to percussion and focal fremitus at the left posterior lung field
CV: tachycardic, irregularly, irregular, no murmurs, rubs, gallops, laterally displaced PMI, pulses equal and symmetric bilaterally, no visible JVP
ABD: soft, nontender, no rebound, nondistended, tympanic to percussion, BS present, liver border at the costal margin, no palpable splenomegaly
EXT: no lower extremity edema, no rashes, no joint swelling or erythema

Labs





Lactate 3.4 ABG: 7.31/38/85

UA: RBC: 2 WBC: 2 LE: negative Nitrites: negative

Troponin 0.03 x 2

Imaging
CXR: Airway midline hyperinflated lungs bilaterally, bones without acute fracture, cardiac size not enlarged, disruption of the left cardiac border, left lower lobe opacity, diaphragm sharp without obvious pleural effusion

EKG
Normal sinus rhythm, with normal axis, tachycardic, p-waves normal, narrow QRS, normal t waves, normal PR, QT interval, no segment elevation or depression

Assessment and Plan
#Sepsis 2/2 Acute Bacterial Pneumonia
 # Acute on Chronic Respiratory Failure 2/2 Moderate COPD
The patient history suggests acute COPD exacerbation supported with increased O2 demand, sputum production, and wheezing. The likely trigger is sepsis (tachycardia, fever, elevated WBC, elevated lactate), opacity on xray from acute bacterial pneumonia likely gram-positive vs atypical. Last hospitalization 1 year ago, suggesting community acquired infection. Other considerations would be fungal (i.e. coccidioidomycosis) and viral (influenza A/B, parainfluenza, RSV, human metapneumovirus). No diarrhea, dysuria, nausea, vomiting. Not likely acute heart failure exacerbation without PND, orthopnea, lower extremity edema. Less likely MI without chest pain, normal initial troponin and EKG, though diabetes can present with silent MI. Well's score 0 making PE less likely and is on pharmacologic anticoagulation already.

Plan:
- Albuterol-ipratropium nebulizers q4hrs scheduled, albuterol q2hrs PRN
- Methylprednisolone 60mg x 1, prednisone 40mg daily x 4 days
- Ceftriaxone 1g IV q24 hrs, Azithromycin 500mg IV qDay
- Sputum culture and gram stain, Strep pneumonia antibody, legionella urine ag, mycoplasma antibody, Coccidioides antigen
- Respiratory viral panel, procalcitonin
- Lactated ringers 1L and reevaluate, judicious use in setting of heart failure
- Repeat Lactate 6 hrs after last
- Blood cultures x 2 for sepsis
- Consider step up therapy: Fluticasone 250mcg/Salmeterol 50mcg inhaled BID at discharge

#Pre-Renal AKI (b/l 1.0) stage 2
In setting of sepsis, most likely cause of AKI is pre-renal. Clinically volume down. BUN/Cr >20. Should consider post renal as reversible cause of kidney injury. Cannot rule out intrarenal causes, though less likely without RBC or protein in UA.

Plan:
- fluid resuscitation as above
- bladder scan to assess for post renal etiology
- urine sodium and creatinine
- consider renal ultrasound if does not improve after fluid resuscitation
- monitor creatinine
- avoid nephrotoxic agents, hypotension, contrast
- renally adjust medications

 # Left Ventricular Heart Failure with reduced Ejection Fraction (35%), NYHA Class 1, 2/2 Ischemic Cardiomyopathy s/p LAD stent (5/2012)
 # Hyperlipidemia
 # HTN
Stable cardiac disease, completed 12 months of DAPT, now on Aspirin only. Clinically compensated without lower extremity edema, warm and dry. BNP 100 compared to previous 1200. No chest pain, mild troponin elevation which is likely type 2 NSTEMI in setting of sepsis. EKG without ischemic changes.

Plan:
- reduce home dose metoprolol 25mg daily
- hold lisinopril and furosemide in setting of AKI and sepsis
- continue ASA 81mg
- Continue Atorvastatin 40mg qHS

#Gap and Non-Gap Metabolic Acidosis with Respiratory compensation
Delta-Delta suggest mixed gap/non-gap acidosis. Anion gap is 16 likely 2/2 lactic acidosis. Nongap component likely 2/2 AKI. No signs of diarrhea. Could consider DM related RTA 4, though baseline renal function is normal. RTA 1 and 2 would be less likely with normal K. Winter's suggest respiratory compensation.

Plan:
- Treat underlying sepsis and AKI
- Monitor for improvement

 # Paroxysmal Atrial Fibrillation, on anticoagulation, CHADS2-VASc 4
On anticoagulation, rate controlled. Home metoprolol ER 100mg qday

Plan:
- Reduce home dose to Metoprolol ER 25mg daily
- Rivaroxaban 20mg daily

Diabetes Mellitus, type 2, HbA1c 7.5%, on insulin
Blood sugars mildly elevated on admission. No signs of DKA. Home regimen Glargine 20U qHS and Lispro 5U qAC, Metformin 1000mg BID

Plan:
- Reduce to Glargine 10 units qHS while inpatient
- Reduce to lispro 2U with meals + ISS
- Hold Metformin 1000mg BID while inpatient esp with AKI

Osteoarthritis
- Tylenol 650mg q6hrs as needed for pain

Gout
- Allopurinol 300mg daily

Checklist:
Code Status: Full Code
MPOA: Wife, Glenda
DVT PPX: chemically anticoagulated
Diet: Cardiac
Dispo: Pending Return to baseline respiratory status

Medical Student, MS 3
07/01/2018