**Identifying Data:**

Full Name: D.D.

DOB: 09/07/1956

Date & Time: 02:45PM on 10/10/2022

Location: Astoria, NY

Race/Nationality: Caucasian

Marital Status: Married

Religion: Greek Orthodox

Source of Information: Self

Reliability: Reliable

Source of Referral: Self

Transportation: Self - ambulated to clinic from home

**Chief Complaint:** cough with yellow phlegm x3 days

**History of Present Illness:**

66 y/o male, PMHx COPD, HTN, HLD, DM2, presents with complaints of constant productive cough with yellow sputum x3 days. He smokes 1/2PPD x30 years. The cough is worse with laying down at night and not relieved with OTC Nyquil or Tylenol. There is mild improvement in symptoms after taking his Ventolin inhaler. He is now experiencing non-pleuritic, non-positional, 3/10 achy pain over the right anterior chest wall whenever he coughs. Last COPD exacerbation 1 year prior, managed outpatient. Admits to shortness of breath, nasal congestion, body aches, fatigue. Denies recent sick contacts or travel, abdominal pain, n/v/d, ear pain, eye pain, headache, sore throat, hemoptysis, palpitations, dizziness, syncope, AMS, swelling, flank pain, changes in urination or bowel habits.

**Past Medical History:**

* COPD – x7 yrs
* Hypertension – x15 yrs
* Hyperlipidemia – x15 yrs
* Type 2 Diabetes Mellitus – x10 yrs
* *Hospitalizations*
	+ Denies prior hospitalizations
* Up-to-date on immunizations
* Vaccinated against SARS-CoV-2 – Pfizer x3
* Influenza vaccine 2021

**Past Surgical History:**

* Indirect Inguinal Hernia repair 2017

**Medications:**

* Atorvastatin 10mg 1x daily – CVD
* Valsartan 160mg 1x daily – HTN
* Metformin 1000mg 2x daily – NIDDM
* Albuterol 90mcg HFA inhaler PRN – COPD
* Omega-3 Fatty Acid OTC 1x daily

**Allergies:**

* NKDA, food or environmental allergies

**Family History:**

* Mother – living 86 y/o, HTN & dementia
* Father – Deceased at 76 y/o pneumonia
* Maternal Grandmother – unknown
* Maternal Grandfather – unknown
* Paternal Grandmother – unknown
* Paternal Grandfather – unknown
* Siblings – 3 brothers living, HTN
* Daughter – 42 y/o, living & healthy
* Son – 44 y/o, living & healthy

**Social History:**

* Habits – occasional alcohol (1-2x beers biweekly), ½ PPD tobacco x30 yrs, Denies marijuana or other illicit drugs. Caffeine use – 1 cup of coffee/day
* Travel – no recent travel
* Occupation – Retired construction worker
* Social/Marital History – Married x48 years, one pet cat. Bowls on weekends with friends and goes on daily morning walks with his wife
* Diet – Reports eating 3 meals per day consisting of protein, fruits, & vegetables.
* Sleeps 8 hrs/night (11:00PM-7:00AM). Feels rested and sleeps through the night. Denies snoring.
* Exercise – Daily morning walk ½ mile
* Safety measures – wearing seatbelt. Does not engage in sports that require helmet use
* Sexual History – monogamous relationship with wife. sexually active, no barrier protection. no history of STDs

**Review of Systems:**

* General
* Denies recent weight loss/gain, loss of appetite, fever/chills/night sweats
* **Admits to generalized weakness/fatigue**
* Skin, hair, nails
* Denies excessive sweating, pigmentations, moles, change in hair distribution, pruritis, xerosis
* Head
* Denies headache, vertigo, head trauma
* Eyes
* Denies visual disturbances, abnormal lacrimation, photophobia, pruritis
* Last eye exam 1 yr prior (No change in vision). Visual acuity unknown. Wears prescription glasses for nearsightedness
* Ears
* Denies deafness, pain, discharge, tinnitus, hearing aids, or feeling of fullness
* Nose/Sinuses
* Denies epistaxis
* **Admits to congestion and nasal discharge**
* Mouth and Throat
* Denies bleeding gums, sore tongue/throat, mouth ulcers, voice changes, or dentures. Last dental exam 1 year prior.
* Neck
* Denies swelling/lumps, stiffness, or decreased ROM
* Pulmonary System
* Denies wheezing, hemoptysis, cyanosis, orthopnea, or PND
* **Admits to SOB, DOE, and cough**
* Cardiovascular System
* Admits to Hx of HTN and **chest wall pain**
* Denies known murmur, palpitations, irregular heartbeat, edema/swelling of ankles/feet, or syncope
* Gastrointestinal System
* Denies changes in appetite, intolerance to specific foods, N/V/D, dysphagia, pyrosis, flatulence, abdominal pain, jaundice, changes in bowel habits, hemorrhoids, constipation, rectal bleeding/blood in stool, or constipation. Last colonoscopy 5 years prior - normal per pt
* Genitourinary System
* Denies changes in frequency, nocturia, urgency, oliguria, polyuria, dysuria, abnormal color of urine, incontinence, or flank pain
* Sexual History – refer to Social Hx
* Nervous System
* Denies seizures, headache, loss of consciousness, sensory disturbances, ataxia, loss of strength, change in cognition/mental status/memory, or weakness
* Musculoskeletal System
* **Admits to generalized muscle/joint pain**
* Denies deformity, swelling, redness, or Hx of arthritis
* Peripheral Vascular System
* Denies intermittent claudication, coldness/trophic changes, varicose veins, peripheral edema, or color change
* Hematologic System
* Denies anemia, easy bruising/bleeding, lymph node enlargement, prior blood transfusions, or history of DVT/PE
* Endocrine System
* Denies polyuria/polydipsia/polyphagia, heat/cold intolerance, goiter, excessive sweating, or hirsutism
* Psychiatric
* Denies depression/sadness, anxiety, or obsessive/compulsive disorder. Never seen a mental health professional. Never taken psychiatric medications

**PHYSICAL EXAM**

Vital Signs:

BP: 139/78 mmHg – sitting & supine, L arm

RR: 16 breaths/min, unlabored

Pulse: 76 bpm, regular

T: 99.8F (oral)

O2 SAT: 94% room air

Height: 68 inches Weight: 198 lbs BMI: 30.1

General Appearance: alert, oriented, not distressed, appropriate development, well nourished, appropriate posture, appears stated age, well dressed

Head: normocephalic, atraumatic

Eyes: Symmetrical OU. No strabismus/exophthalmos/ptosis. Sclera white, cornea clear, conjunctiva pink. No erythema of lacrimal sac. PERRLA. EOM intact with no nystagmus. Red reflex intact OU. Retinal vessels unremarkable (no AV nicking, hemorrhages, exudates, or neovascularization). Optic disc unremarkable (cup-to-disc ratio < 0.5 OU with appropriate color & contour), no papilledema.

Ear: Appropriate in size. Ear and tragus nontender AU. No lesions/masses/trauma visualized on external ear. No discharge/foreign bodies in external auditory canals AU. TM pearly white/intact with cone of light in appropriate position AU. Non-obstructing cerumen noted in the ears bilaterally.

Nose: Symmetrical, no masses/lesions/deformities/trauma/discharge. No tenderness/bogginess/step off to palpation. Nares patent bilaterally. Nasal mucosa pink & moist. Septum midline. **Inferior nasal turbinate hypertrophy and clear mucus visualized on anterior rhinoscopy.** No ulcerations/foreign bodies visualized.

Sinuses: No tenderness to palpation over bilateral maxillary/frontal sinuses.

Mouth & Throat:

Lips: Pink & moist. No cyanosis, lesions, or ulcerations

Oral Mucosa: Pink, well hydrated. No masses/lesions noted. No leukoplakia.

Palate: Pink, well hydrated. No visible lesions/masses/scars.

Teeth: No dental caries, missing, or loose teeth. All teeth have appropriate shape.

Gingivae: No hypertrophy or recession. Unremarkable

Tongue: pink, well papillated. Frenulum intact. No masses/lesions/deviation.

Oropharynx: Well hydrated, no exudate/masses/lesions/foreign bodies noted. **Grade 1 tonsils. Copious clear drainage and cobblestoning of the posterior oropharynx.** Uvula pink, midline with no lesions or edema.

Neck: Trachea midline. No masses/lesions/pulsations noted. Neck supple, non-tender to palpation. Free range of motion. No stridor noted. No cervical adenopathy. No carotid pulses/thrills/bruits heard on auscultation. Thyroid is non-palpable, unremarkable. No goiter

Lymph nodes: Non-palpable, unremarkable preauricular, postauricular, submandibular, posterior cervical chain, anterior cervical chain, supraclavicular, and infraclavicular lymph nodes

Cardiovascular: JVP is 2.5cm above sternal angle with head of bed at 30 degrees. PMI located at the 5th ICS in midclavicular line. Carotid pulses are 2+ bilaterally without bruits. RRR. S1/S2 distinct with no murmurs or S3/S4 heard. No splitting of S2 or friction rubs appreciated.

Chest: Symmetrical with no deformities or trauma. No tenderness on palpation. Respirations unlabored, no paradoxical respirations or use of accessory muscles. Lat/AP diameter 2:1.

Lungs: **Rhonchi present with decreased tactile fremitus in the upper lung fields bilaterally.** Chest expansion/diaphragmatic excursion symmetrical.

Abdomen: Abdomen symmetric and flat. No scars, striae, or pulsations noted. Bowel sounds are normoactive in all 4 quadrants. No aortic/renal/iliac/femoral bruits heard. Non-tender to palpation and tympanic throughout. No guarding or rebound tenderness. No hepatosplenomegaly to palpation. No CVA tenderness appreciated.

Skin: Warm and moist. Good turgor. Non-icteric. No tattoos noted. No moles.

Hair: Average quantity and distribution. No seborrhea/lice/dandruff noted

Nails: No clubbing, capillary refill < 2 seconds in upper & lower extremities, appropriate shape & color.

Musculoskeletal: Appropriate alignment of spine. Full ROM. No joint erythema or tenderness. Appropriate muscular development. Normal gait

Neurological: A&O x3. No tremors or fasciculations.

Psychiatric: Oriented to person, place, & time. Good affect, no hallucinations or abnormal behavior.

**Assessment:**

66 y/o male, PMHx COPD, DM2, HTN, HLD with 3 days of productive cough, SOB, fatigue, and generalized body aches noted to have wheezing and decreased tactile fremitus on exam.

*Differential Diagnosis:*

* ***COPD Exacerbation***
	+ Pt has Hx of COPD with an exacerbation 1 year prior and continues to smoke. He has wheezing and decreased tactile fremitus suggestive of fluid in the lungs from exacerbation along with his Sx of new onset SOB and DOE. Additionally, he is bringing up increased sputum production and notes that Sxs temporarily improve with use of his albuterol inhaler.
* ***Pneumonia***
	+ Pt has Signs & symptoms including acute SOB, hypoxemia (baseline o2 sat% 96%), and findings on pulmonary exam. However, the patient does not have tachypnea or fever. Regardless, if the patient was to have pneumonia, community acquired would be most likely and COPD exacerbation management will cover for CAP organisms.
* ***Viral URI - rlo influenza & covid***
	+ Patient has non-specific findings suggestive of viral URI such as cough, congestion, nasal discharge, body aches and fatigue. He has not received this year’s influenza vaccination. However, rapid influenza A&B and covid-19 tests were both negative in office.
* ***Heart failure***
	+ Acute decompensated HF should be considered in the differential given his acute shortness of breath, cardiovascular history, and pulmonary findings that could indicate pulmonary edema. However, patient does not have elevated JVD, peripheral edema, hepatosplenomegaly, or other symptoms commonly attributed to HF and is hemodynamically stable aside from the slight decrease in his baseline o2 saturation.
* ***Cardiac arrhythmia***
	+ Pts with COPD are at increased risk of arrhythmias, especially atrial fibrillation which often coincides with a COPD exacerbation. However, ruled out current arrhythmia with ECG.
* ***Pulmonary embolism***
	+ Given patients' cardiopulmonary history and acute SOB, PE should be considered. However this is less likely since chest pain is not pleuritic in nature and there is purulent sputum production and history of URIs that supports another cause as the primary etiology. Pt is not tachypnic or tachycardic.
* ***Pneumothorax***
	+ COPD is a risk factor for pneumothorax. However, his chest pain is not pleuritic and he is not exhibiting labored breathing at rest on physical exam. Education on signs and symptoms that would warrant further workup for pneumothorax should be provided as part of the plan.

**Plan:**

* COPD exacerbation / URI
	+ - Testing
			* Influenza and covid-19 rapid + PCR testing – **negative**
			* ECG to assess for chest pain and signs of HF – **normal sinus rhythm**
			* Consider CXR, CBC, sputum culture if there is no improvement or worsening in 36 hours of starting Abx therapy
		- Medication
			* Albuterol HFA 90mcg inhaler PRN
			* Prednisone 40mg once daily for 10 days
			* Azithromycin 500mg single loading dose, then 250mg once daily on days 2-5. (Pt does not meet clinical criteria for pseudomonas coverage at this time)
		- Follow up
			* Return in 3 days to monitor for improvement. If no improvement, consider further testing mentioned above to identify causative organisms.
		- Education & Counseling
			* Provide smoking cessation counseling
			* Discuss supportive treatment measures
			* Use Tylenol PRN for pain or if temp >100.4
			* If pt experiences increased dyspnea, chest pain, dizziness/syncope, AMS, or uncontrolled fever go to nearest ER for further evaluation and management