

Internal Medicine

Collected by:

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1st Semester, 1st Day

- 1. Hx. of generalized weakness, fatigue, muscle aches since 2 days, with lab tests and urine analysis.
 - Diagnosis: Rhabdomyolysis
 - Most dangerous lab: Hyperkalemia
 - Treatment hyperkalemia: calcium gluconate, Insulin, Sugar (Dextrose), Beta agonist ... C BIG K DROP (mnemonic)
 - Urine analysis question

2. PEx. Examination of posterior chest for a patient with ILD (with general)

• What do you hear in IPF? Fine inspiratory crackles

1st semester, 2nd Day

- 1. Hx. of back pain
 - Diagnosis: ankylosing spondylitis
- 2. PEx. for a patient with CHF
 - Examine JVP and pericardium (mention the signs of heart failure), mention lower limb edema and ascites.
 - Most common cause of HF?
 - Blood test for HF?

¹ 2nd Semester, 1st Day

1. Hx. 55 year old patient came to ER complaining from chest pain

- Mention differential diagnosis.
- Mention investigations.

2. PEx. of the abdomen for abdominal distension

• Mention two causes for ascites with SAAG>1.1

¹ 2nd semester, 2nd Day

1. Hx: 50 year old man with resistant secondary hypertension despite taking three antihypertensive, potassium 3.1

- Deferential diagnosis.
- Investigations to confirm,
- Image to confirm .

2. PEx: General and anterior chest examination

- How to confirm COPD?
- Differential of exacerbated COPD.



1st Semester, 1st Day

- 1. Hx. 30 year old female, complains of fatigue, irregular mense, with T3, T4, TSH lab tests are lower than normal (and the normal range is given with the question).
 - Take a history + what is the diagnosis most likely according to the history.
 - 2 investigations: Ultrasound & auto-antibodies

2. PEx. patient with ischemic heart disease, HTN, DM, post CABG surgery

- Do JVP examination
- Name the sign that shows increase in JVP with inspiration: Kussmaul sign & its causes.
- What is the suspected diagnosis? Constrictive pericarditis.

3. PEx. Patient with bronchiectasis + SOB of 1 month duration.

- Do posterior chest examination with general.
- 2 investigations: sputum culture is important.

1st Semester, 2nd Day

- 1. Hx. 18 years old single female came to your clinic with uncontrolled hypertension 200/100.
 - Take a focused history for secondary hypertension causes.

2. PEx. 35 years old male, with mid systolic murmur increased with valsalva maneuver.

- Examine precordium without general.
- Diagnosis: HOCM

3. PEx. Patient diagnosed with hepatitis B.

- Examine general for stigmata of chronic liver disease + inspection for abdomen and splenomegaly.
- Mention hepatic decompensation symptoms.

⁹ 2nd Semester, 1st Day

1. Abdominal palpation and percussion

- DDx. for 11cm palpable liver span and nodular: Cirrhosis
- DDx. for hard liver edge: Malignacy
- DDx. for pulsatile liver: Right sided heart failure with tricuspid regurgitation. ++ the patient was smoker with COPD: hyperinflation

2. PEx anterior Chest with general

- Name investigations for pneumonia: chest xray
- What does indrawing of intercostal spaces indicate? Accessory muscle use and respiratory failure

3. Hx DVT

- Name risk factors: travel/ pregnancy / ocp / family hx
- Name 3 complications: PE/compartment syndrome/venous ulcer(postthrombotic syndrom
- Name 3 investigations: D-dimer / venography + Doppler US

¹ 2nd semester, 2nd day

1. Take a history from presented with left leg pain

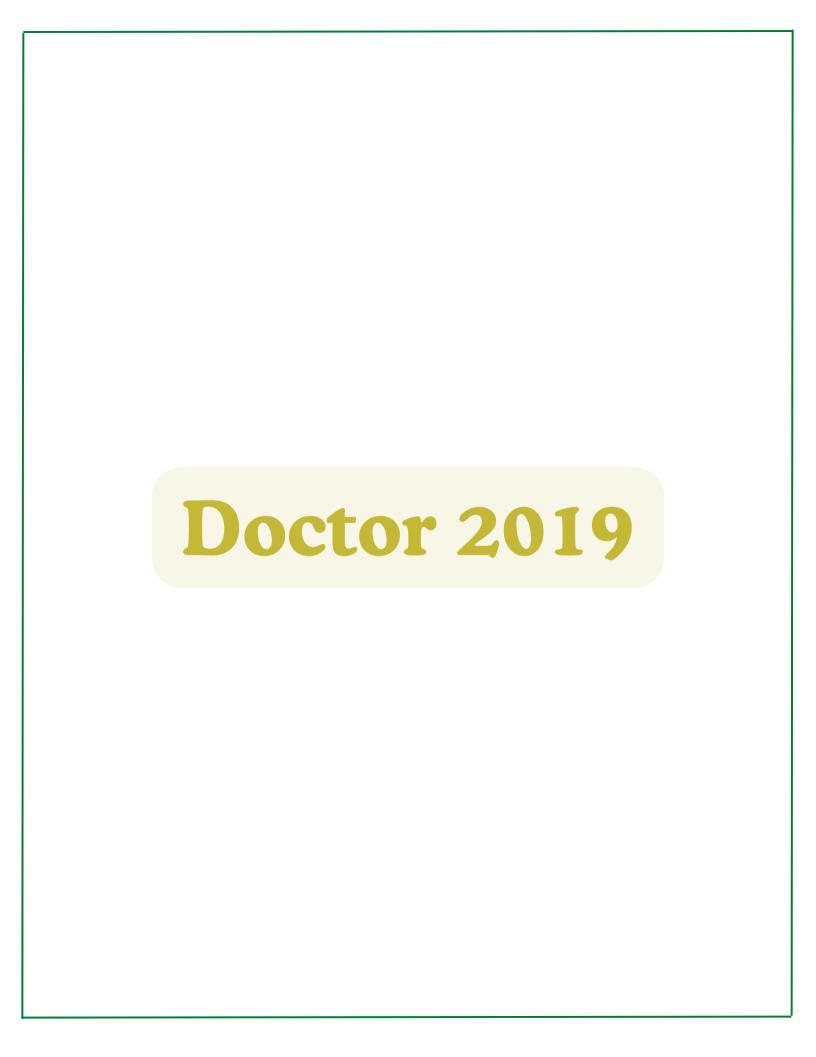
- Investigations
- Dx? Gout

2. PEx: Precordium with JVP syncope, cannon a wave with bradycardia

- DDx
- Dx? AV block

3. GI palpation and percussion

• Give 3 causes for painful hepatomegaly



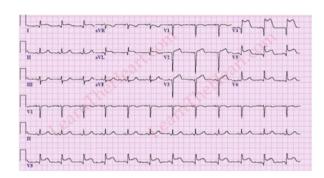
† First Semester, first Day:

1. Hx. 85 years old male complaining from chest pain:

Then an ECG (train of any ECG)

(they changed it during the exam $\widehat{\bullet}$):

- a. Take hx
- b. What's your diagnosis?
- c.The most possible complications?
- d.Causes of the disease?
- e. CHADS VASC score (for A.fib)



ANSWERS: (1st one was anterio-septal MI, 2nd was A.fib)

2. PEx. Posterior Chest

3. PEx. Thyroid

- Hypothyroidism?
- Primary or secondary?

† First Semester, second Day:

1. Hx. Pulmonary Embolism

• (virchow triad+hypercoagulable state)

& SLE (changed during the exam ?)

• (Risk factors + Antiphospholipid syndrome + miscarriage)

2. PEx. Hand

3. Stigmata of Chronic Liver Disease

 Second Semester, first Day: 64 years old female patient with jaundice from 3 weeks, take a history 						
2. Thyroid examinationHyperthyroidism?Primary or secondary?						
3. Examination of precordium						
Second Semester, second Day: Hx. thyroid 						
2. PEx abdomen						
3. PEx. Posterior Chest						

• First rotation:

- 1. 45 year-old woman patient complains of dry eyes and mouth for months .
 - History Taking:
 - 1. Ask about Raynaud's phenomenon, joint pain, parotid gland swelling, loss of pooling of saliva and dental caries, weight loss, smoking history, and family history of autoimmune or rheumatological diseases.
 - 2. Rule out SLE and rheumatoid arthritis.
 - 3. Rule out interstitial lung disease.
 - Labs to Diagnose Sjögren's Syndrome:
 - 1. Anti-SSA
 - 2. Anti-SSB
 - 3.ANA
 - 4. Schirmer test
 - 5. Salivary gland biopsy
 - 6.RF
 - 7. CRP
 - 8.ESR
 - Mention 3 Complications of the Disease:
 - 1. Chronic kidney disease
 - 2. Increased risk of lymphoma
 - 3. Interstitial lung disease

2. Patient with Chronic HCV and Jaundice

• Examine for Chronic Liver Disease:

- 1. Assess the patient's consciousness regarding time, person, and place.
- 2. From the foot of the bed, comment on the shape of the abdomen (flat, not distended).
- 3. From the right side of the patient, comment on the face
- 4. Examine for jaundice.
- 5. Mention fetor hepaticus and parotid gland swelling.
- 6. Hands: Examine for flapping tremor (not just mentioning it, but actually demonstrating the examination). Examine for clubbing (showing that you intend to check the angle). palmar erythema. Assess for muscle wasting. leukonychia.
- 7. Chest: gynecomastia, hair distribution, caput medusae, spider nevi, bruises.
- 8. Testicular Atrophy
- 9. Lower Limb Edema: You should examine for lower limb edema (press on the shin, wait for at least 30 sec...)
- 10. Examine for Splenomegaly: Perform palpation and percussion (with a focus on the location of percussion).

• Mention Lab Results for a Patient with advanced Cirrhosis:

- 1.ALT and AST are mildly elevated, with AST higher than ALT.
- 2. Prolonged PT.
- 3. High alkaline phosphatase and GGT.
- 4. High bilirubin.
- 5. Low albumin.
- 6. Low sodium.

•	What is the Gold	<u>d Standard</u>	<u>Investigation</u>	<u>for Diagnosin</u>	<u>g Liver Cirrhosis'</u>
:	1-:				

Liver biopsy

Second rotation:

- 1. Primary adrenal insufficiency history.
 - Causes
 - Symptoms
 - Investigations
 - Treatment

2. General respiratory and anterior chest examination for a sudden onset of SOB and chest pain.

Diagnosis: Pnemothorax

Third rotation:

1. Female patient presented with generalized weakness, easily fatigue

Proteinuria: +2

Serum creatinine 4 months ago: 2.4

Serum creatinine now: 2.5 No RBC casts, No WBC

- 1. What is the diagnosis? CKD stage 4
- 2. Take a focused history?
- 3. What is the cause of this presentation? (Diabetic nephropathy)
- 4. Mention 2 drugs you want to prescribe to this patient to prevent renal disease progression? (ACEI and SGLT2)

2. A 7 years old patient who had ST elevation on ECG and diagnosed to have MI presented to you 3 days later with SOB

- 1. Examine general and precordium?
- 2. If the patient has a holo-systolic murmur on LLS and thrill, what is the possible cause? VSD
- 3. Mentions three differences between VSD and MR? Location, radiation and thrill.
- 4. Mentions one investigation for this patient? Echo
- 5. How to manage this case? Surgical repair

† Forth rotation

1. Hx: A 38 year old patient has hypertension, large hands, small ring...

"History of the causes and complications"

- Diagnosis? Acromegaly
- Screening test? IGF-1
- Diagnostic test? OGTT
- 2. PEx: Patient presented with hemoptysis for 3 days, smoker (60 pack years).
 - Do anterior chest physical examination.
 - Give 3 ddx.

† Fifth rotation

1. Hx: SLE

2. PEx: Chronic liver stigmata



† First rotation

1. Take a history from 20 year old female presented with a chest pain.

(Acute pericarditis)

2. Take a history from 30 year old female with DVT

- Risk factors of DVT
- Complications of DVT (PE, chronic venous insufficiency, and compartment syndrome)

3. Abdominal exam, palpation and percussion

- DDx of hepatomegaly
- DDx of nodular painless liver (Cirrhosis, malignancy)

4. Hand exam for patient presented with pain in small joints of the hand

- Give DDx
- Investigations
- 3 pulmonary of RA

Second rotation:

- 1. Hypertensive crisis
- 2. Precordium examination
- 3. Posterior chest examination
- 4. Peptic ulcer due to NSAIDs

† Third rotation

- 1. Take a history from a patient with muscle weakness and CK level of 1000.
 - What is your diagnosis? Dermatomyositis

(Others: polymyositis, drug induced myopathy such as statin induced, and cortisol induced, SLE, myasthenia gravis)

- 2. Take a history 27 years old female lady presented with bilateral ankle swelling and periorbital puffiness of two months duration. Her urinalysis showed +4 proteinuria with no WBC, no RBC.
 - What is your diagnosis? Nephrotic syndrome
 - Ask history to identify the cause.

(Others: The most likely diagnosis after taking his history, was focal segmental glomerulosclerosis, although the patient did not have any risk factors such as HIV, drug use, obesity, or sickle cell disease)

3. Do PEx to a patient came with a new heart murmur and fever.

- Perform a general and precordium examination
- What is your diagnosis? IE
- What investigations you want to order? TTE, blood culture

4. Do PEx to 70-year old patient with lung mass on chest x-ray.

- Perform a general and anterior chest exam.
- What investigations do you want to order to confirm diagnosis? Chest CT, transbronchial biopsy, PET scan.

Prorth rotation:

1. General respiratory exam and anterior chest (without auscultation) for a patient with sarcoidosis

- Findings on auscultation?
- Findings on chest CT

2. Abdominal inspection, palpation and ascites exam

- How to differentiate between cardiac and liver causes of ascites?
- SAAG: what do you measure
- If ascites albumin = 1.8 and serum albumin = 3. what is the cause?

3. Joint pain history

• DDX?

4. Pt with chronic renal failure (stage 5) with chest pain of 7 days

- What is the diagnosis?
- What is the most feared complication?
- Management?

† Fifth rotation:

1. Primary Hypothyroidism:

- Focused hx
- Causes: Hashimoto, postpartum, etc..
- Investigations: US + antibodies
- If the patient was given 50 mg Levothyroxine yet the patient came 3 months later with hypothyroidism, what is the diagnosis now? Celiac disease (malabsorption)

2. Physical Examination: Posterior Chest (75 Yo smoker + hemoptysis) followed by:

- 2 Differential Diagnoses?
- Investigations
- Mention other findings the patient may have:
 - Hypertrophic Osteoarthropathy
 - Horner's Syndrome (Triad): Apical Tumor
 - Acanthosis nigricans
 - Weight loss (Cachexia)

3. History: hand tightness (Scleroderma)

- Focused history
- What is the diagnosis?
- Workup? Ant SCl70, anticentromere, CT, etc..
- Pulmonary Complications and their management? Limited PAH, diffuse ILD
- Tx for lung fibrosis? AntiFibrotics

4. General + Precordium examination (Marfan + dyspnea)

- Murmur you expect to hear in this patient? AR
- Complication? Aortic Dissection



Pirst rotation:

- 1. 36 y/o patient with family history of asthma
 - History indicating asthma
 - Assess asthma control in the last month
 - Investigation
- 2. Examination of JVP and waves of JVP
- 3. Glomerulonephritis (case history + 2 protineuria, hematuria, RBC cast)
 - Diagnosis
 - Investigation
 - Causes
- 4. General examination of GI and inspection only of hepatitis C patient, mention stigmata of chronic liver disease.

Second rotation:

- 1. Iron deficiency anemia causes and lab tests needed
- 2. Chest pain female 20 yo pericarditis history
- 3. Abdomen exam
- 4. Ant chest physica & mention 2 pathological causes of decreased TVF on examination

Third rotation:

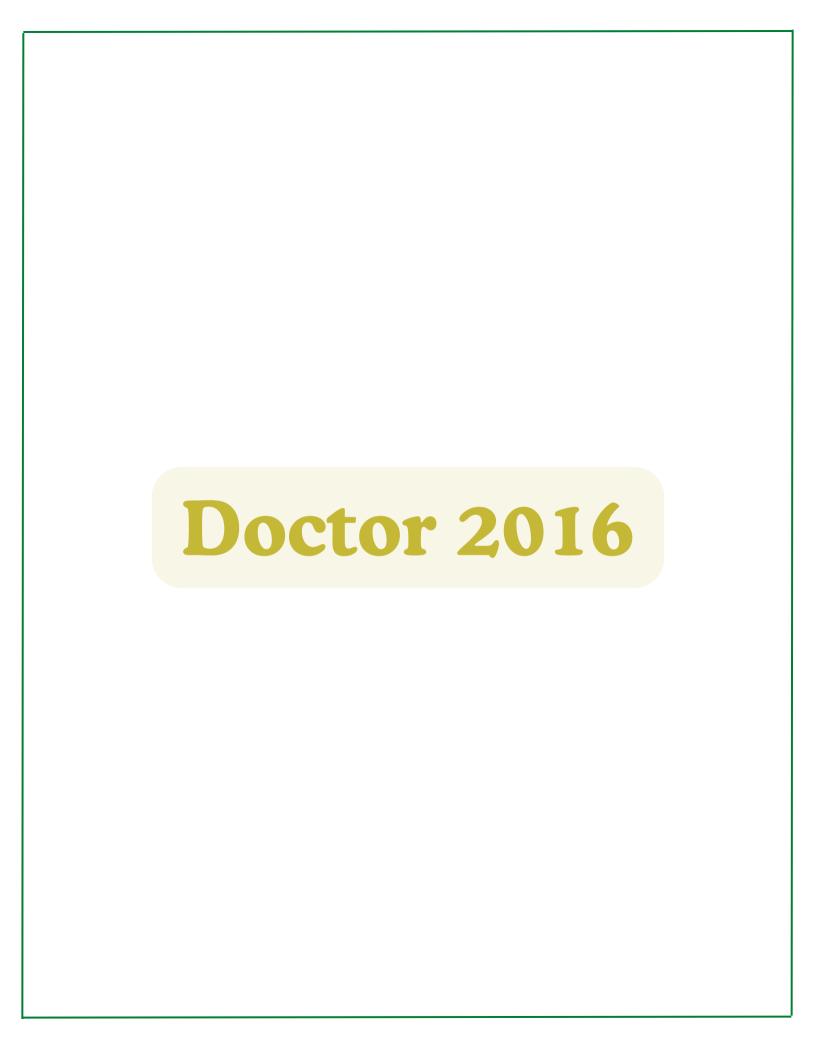
- 1. Bronchiactesis Hx, findings in chest examination
- 2. Nephrotic Hx, causes
- 3. Abdominal palpation and percussion
- 4. Hand examination, ddx, investigations

? Forth rotation:

- 1. Precordium examination
- 2. Posterior chest examination, What are the physical exam findings in pleural effusion?
- 3. JVP examination
 - One Ddx in each of the following:
- *If it's raised, Absent a wave, cannon a wave, prominent y descent, prominent v wave.
- 4. DVT, take a focused Hx with risk factors/ mention 3 complications.
- 5. Male with primary infertility, his Labs: low testosterone, high LH and FSH (primary hypogonadism)
 - Take a focused Hx
 - What's the diagnosis: Klinefelter syndrome XXY

Fifth rotation:

- 1. Patient presents with neck mass, palpitations, and heat intolerance:
- Perform neck and general thyroid physical examination to reach a diagnosis.
- Give 3 laboratory tests to order
- Give two imaging modalities to order.
- 2. Patient presents with sudden onset of severe chest pain and shortness of breath. X-ray revealed pneumothorax.
 - Perform a physical examination of the chest to confirm the diagnosis
 - Answer examiner's questions in regards to the diagnosis and management of this condition.
- 3. Patient presents with history of fatigue, exertional shortness of breath, and pica. You suspect iron deficiency anemia.
 - Take focused history from the patient to support your diagnosis of IDA.
 - Suggest relevant laboratory tests to order.
- 4. Patient presents with a 24-hour history of hematemesis.
- Take history from the patient to identify the cause.
- Give your most likely diagnosis.



First rotation

- 1. Abdominal palpation and percussion
- 2. Chest pain full history and diagnosis (Pericarditis)
- 3. Raynaud case full history specific for rheumatological and non rheumatic causes plus İnvestigations and diagnostic like capillarscopy.

Second rotation

- 1. JVP exam
- How to differentiate from carotid and about waves
- 2. Oral; IDA ask specific questions to confirm and investigations
- 3. DKA case, K=4.5
- Diagnosis
- Management
- Investigations

Third rotation:

- 1. Physical exam: hand
- 2. The patient has RA:
- What are the investigations you're going to order?
- 3 Pulmonary manifestations of RA?
- 3. Oral:
- Hypertensive crisis.. you ddx, hx, p/e, investigation, and management.. BP goals? Where to admit?
- Hx of bloody diarrhea.. dx is ulcerative colitis

Pourth rotation:

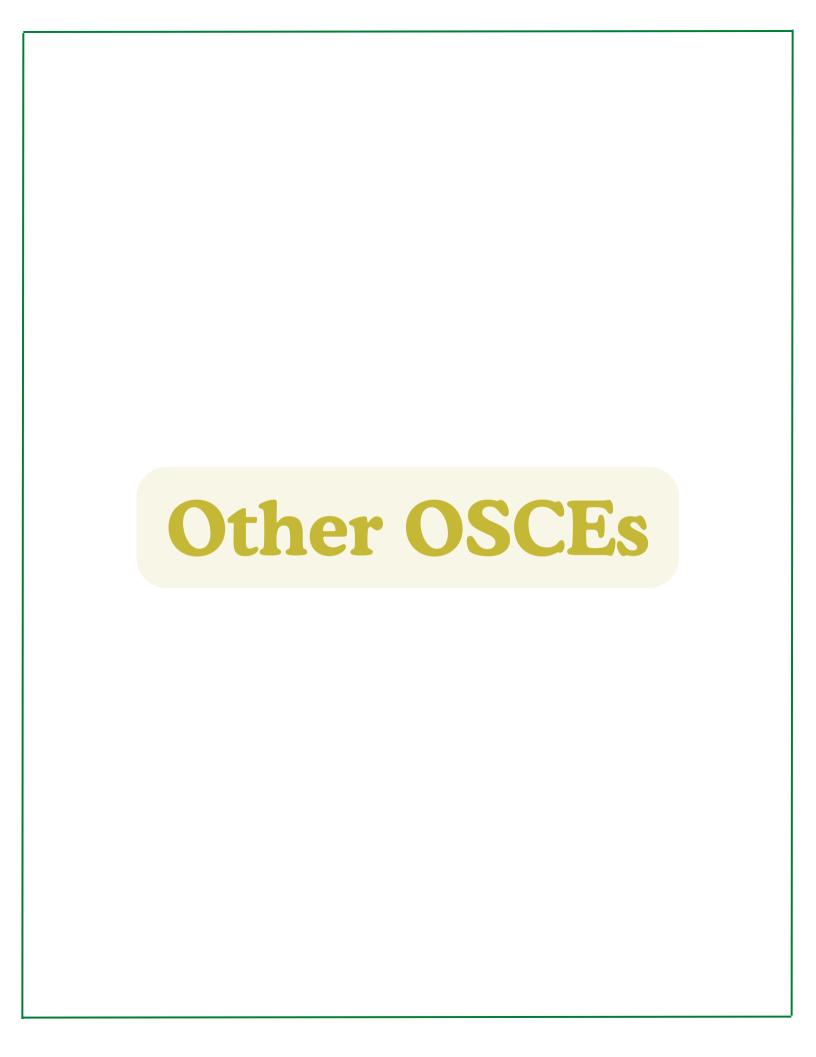
1. Oral: stroke

2. History: Asthma

3. PEx: Focused examination for chronic liver disease

4. PEx: Chronic liver disease

- Give 5 causes for splenomegaly.
- Differentiate between spleen and left kidney.



† Endocrine

- 1. Px of Cushing
- 2. Examine the head, neck, and hand for these given TSH and T4 values (it was hypothyroid)
- 3. Female patient with 2ndary diabetes. Take a history. (Extra note: be sure to r/o acromegaly, cushing's, thyrotoxicosis, etc in your questions)
- 4. Steroids side effects

Nephro

- 1. History of Lower abdominal pain with urinary symptoms: history taking and diagnosis: cystitis.
- 2. History for lab results (mild proteinuria, hematuria) and give 3 differentials
- 3. Take a history of pt with AKI
- 4. Nephro case where there was high urea and creatinine level .. Take history
- 5. Renal failure, what tests can tell if it's acute or chronic
- 6. Urine analysis "color= hazy, protein= ++, WBCs= seen, RBCs= numerous" >> take history.

† Hemato

Hx anemia (IDA), and labs needed (3 times)

† Infectious

History for a pt with high titers of Brucella focusing on the complications and mention the most serious complication

Rheumatology

- Hx: lower back pain and give the most likely diagnosis (ankylosing spondylitis)
- History of RA & lab tests. (2 times)
- SLE hx
- Rayanoud case full hx for rheuumatlogical and non rheumatic cause (+diagnosis, investigation)

Cardio

- 1. Hx: Leg pain & swelling, with investigation (DVT).
- 2. ECG showing atrial fibrillation, take hx
- 3. History of 50 yo female patient has HTN and came in with bp 190/90; not control despite treatment. Explore the possible causes of her hypertension.
- 4. Hx of 25 yo female patient with fast heartbeat & DDx. (SVT)
- 5. Examine the pericardium for a pt with heart failure
- 6.ECG st MI, What is this? And history
- 7. St elevation >> ant.infarction full Hx
- 8. Oral, hypertensive crisis, Hx, PEx, ddx, investigation, and managemen. BP goals? Where to admit?

† GI

- 1.70 year old male patient came in complaining of diarrhea. Take a history
- 2. Take a history focusing on the precipitating factors of hepatic of encephalopathy
- 3. Examination for signs of cirrhosis
- 4. Take a history of a patient complaining from dysphagia
- 5. Upper GI bleeding hx
- 6. Bloody diarrhea Hx (UC)
- 7. GI general exam

RS

- 1. Obstructive sleep apnea historyA
- 2. OSA examination (3 times)
- 3.20 yo female with dry cough of 2 months duration $\ensuremath{\mathcal{E}}$ 3 Investigations.
- 4. Examine posterior chest for asthma exacerbation
- 5. Examination of COPD exacerbation
- 6. Examine the patient with severe bronchial asthma
- 7. Hx of asthma, and how to assess the severity, and investigations
- 8. ABGs , hypoventilation >> take Hx
- 9. An chest exam & mention 2 causes of decrease TVF
- 10.DVT familial thrombophilia, check chest exam >> pulmonary HTN