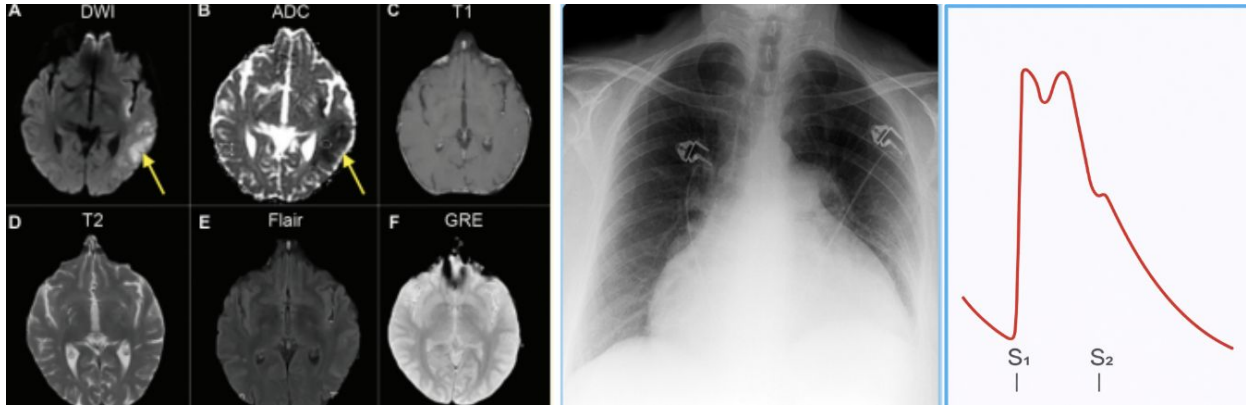
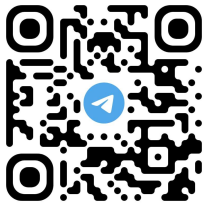


GENERAL MEDICINE

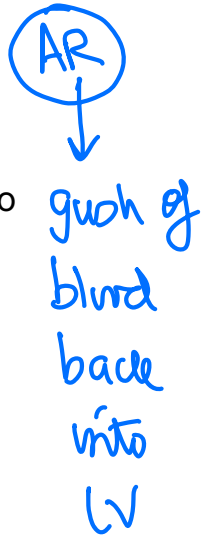


Brain **work out** session 1

Quincke

1. A middle-aged male presented with gradually progressive effort intolerance over the last few months. On physical examination, there is bounding pulsation in the neck with prominent carotid upstroke. Careful inspection of the nail beds reveals **rhythmic pulsatile blanching** synchronous with the cardiac cycle. Which of the following auscultatory findings best corresponds to this clinical presentation?

- a. Late diastolic murmur
- b. Early diastolic murmur**
- c. ~~Systolic crescendo decrescendo~~
- d. ~~Mid systolic murmur~~



* CAROTID THRILL

AS

* dancing carotids

AR

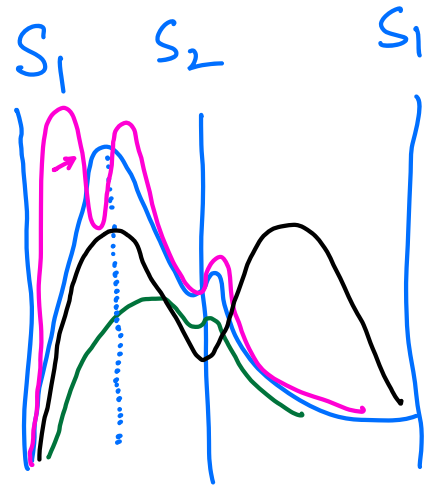
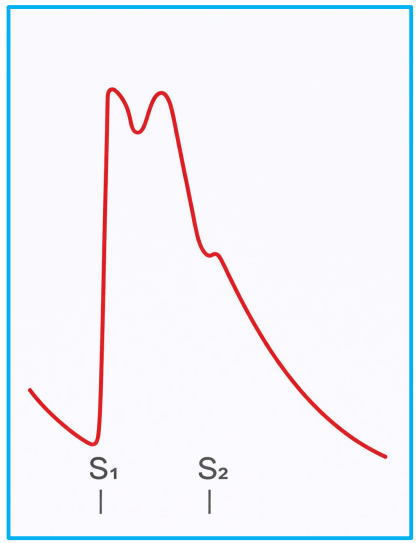
[PAID : Mnemonic
PASS

CONSISTENCY * AR SEVERE = AUSTIN FLINT

* PAK " = GRAHAM STEEL

2. You are asked to assess the pulse tracing of the patient. The following pulse corresponds to involvement of which of the following heart valves?

- a. Pulmonic valve
- b. Aortic valve**
- c. Mitral valve
- d. Tricuspid valve



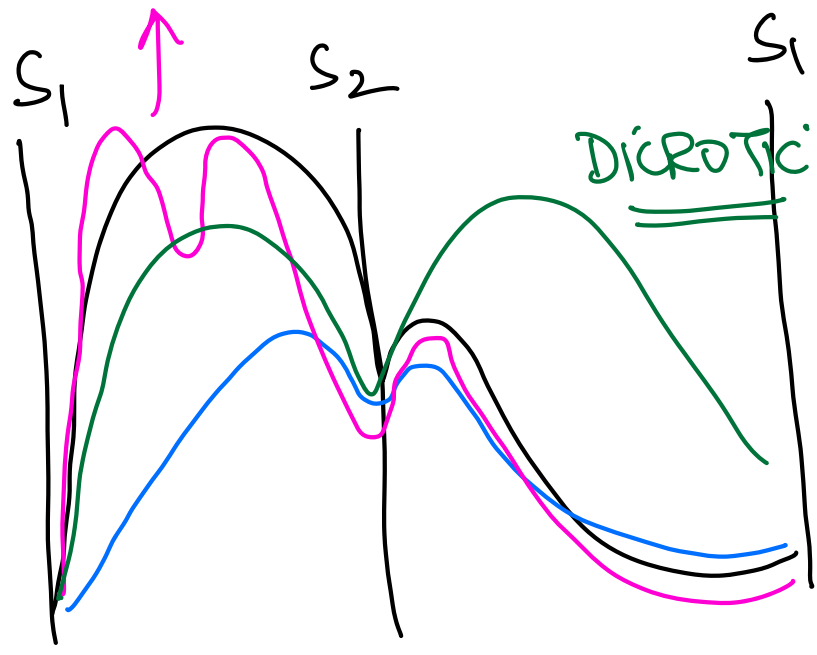
AS
* S + D = DICROTIC P
DCM

GRIND

. AR

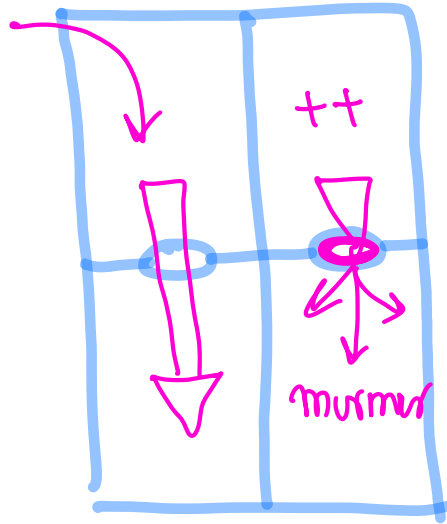
BISFURIENS

AS
PULSUS PARVUS
et TARDUS



3. A patient presents with complaints of shortness of breath and effort intolerance. On auscultation, a loud opening snap with mid diastolic murmur is heard. Echocardiography shows an EF of 65%. What is the diagnosis?

- a. Aortic stenosis
- b. Mitral regurgitation
- c. Critical mitral stenosis $< 1 \text{ cm}^2$
- d. Aortic regurgitation



$$EF = \frac{SV \downarrow}{EDV \downarrow} = \textcircled{N}$$

MUST KNOW

- diastole -

4. A young patient presents with persistently elevated blood pressure despite adequate lifestyle measures. Laboratory evaluation reveals hypokalemia associated with metabolic alkalosis. There is no history of diuretic intake, and renal function tests are within normal limits. Which of the following is the most likely diagnosis?

~~a.~~ Pheochromocytoma

episodic / paroxysmal

HTN

b. Conn syndrome

c. Liddle syndrome

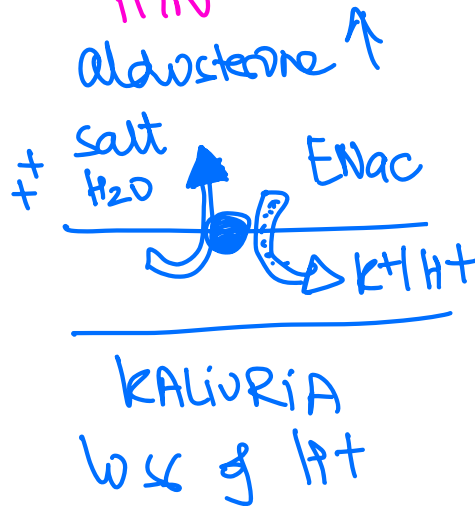
gain of

~~d.~~ Carcinoid syndrome

function of

5HT

ENac



MEN TYPE 2 / TYPE 3

5. A patient was detected to have a medullary carcinoma of thyroid and has a family history of endocrine tumors, and genetic counselling is advised. The clinician plans further evaluation to identify associated inherited syndromes and guide family screening. Which of the following statements regarding this condition is correct?

- a. ~~Menin proto-oncogene~~ mutation is associated with MEN 1
- b. Patients should be screened for RET gene mutations associated with MEN 2A and MEN 2B
- c. Medullary thyroid carcinoma arises from follicular cells and is associated with BRAF mutation ← Papillary & Thyroid
- d. Prophylactic thyroidectomy is not indicated in asymptomatic family members

=

6. A middle-aged woman presents with long-standing complaints of dryness of eyes and mouth, requiring frequent use of artificial tears and water while swallowing food. She has also intermittent pain with stiffness in multiple small joints of the hands. There is no history of skin tightening, Raynaud phenomenon, oral ulcers, or photosensitive rash. Based on this clinical presentation, what is the most likely diagnosis?

- a. Sjogren syndrome
- b. Systemic lupus erythematosus
- c. Rheumatoid arthritis PIP MCP WRIST
- d. Scleroderma


↓
Anti TOPOISOMERASE

[DRY EYES
DRY MOUTH]
* tOC: labial (minor Salivary Gland Bx)
* Ro SS-A
* La: SS-B

7. A middle-aged male presents to the OPD with complaints of vague abdominal discomfort, intermittent diarrhea, and recent weight loss. There is no history of alcohol intake or gallstone disease. MRI abdomen reveals a diffusely enlarged pancreas with a characteristic "sausage-shaped" appearance. Laboratory evaluation shows markedly elevated serum IgG4 levels. Which of the following is the best treatment for this patient?

- a. Steroids
- b. Antibiotics
- c. Surgery
- d. Pancreatic enzyme supplements

1. TB
2. Cancer
3. Malabsorption
4. IgG4 related disease


Sausage pancreas

8. A 14-year-old boy presents with slowly progressive muscle weakness and wasting involving the humero-peroneal distribution with extreme difficulty in walking. He has contractures at both elbows and legs and Achilles tendons since childhood. ECG shows AV conduction defects. Similar illness is present in affected family members across generations. What is the diagnosis?

a. DMD → CHF. DCM

b. BMD ↗

c. CMT → STORK leg appearance

d. Emery-Dreifuss syndrome

EMERIN, XLR

- HUMERO-PERONEAL

#

- CONTRACTURE

- 3rd degree H.B

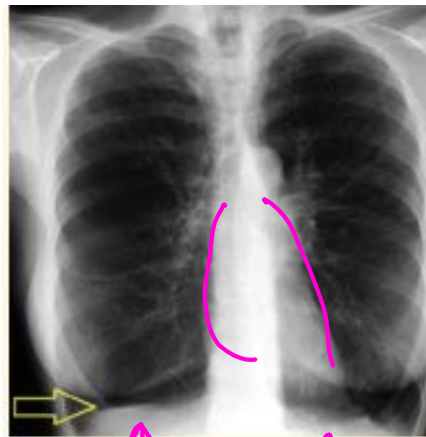
- neuropathy

- onion skin app
nerve

9. A 60-year-old female presents with chronic breathlessness and cough for several years, which has progressively worsened. She has a significant smoking history of 30 pack-years. There is a history of atopy. Pulmonary function testing shows a post-bronchodilator FEV₁ /FVC ratio of < 0.7 with an 18% improvement in FEV₁ after bronchodilator administration. CXR is shown below. What is the diagnosis?

- a. Asthma COPD overlap syndrome
- b. COPD
- c. ILD
- d. Asthma

$\Delta FEV_1 \uparrow$
 $> 12\%$

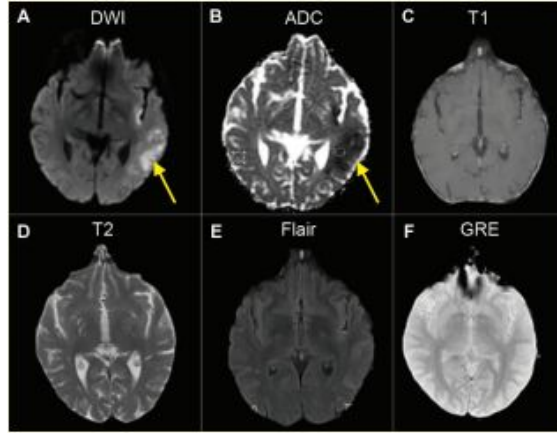


Tubular ♡
*
air *
Trapping
Flattening
of
diaphragm

COPD

10. A 65-year-old man presents with sudden onset weakness of the left upper and lower limbs and slurred speech which started 2 hours ago. MRI of the brain is shown in the image. Which of the following is the most appropriate initial management?

- a. Aspirin and clopidogrel
- b. Thrombolysis with alteplase
- c. Diuretics
- d. Anticoagulation with warfarin



~~TIA~~
STROKE
A/I's

A/I's
y > 185 mmHg
110

< 4.5 HOUR : ideal

Upper limit : 2026 guidelines: < 9 hrs

*

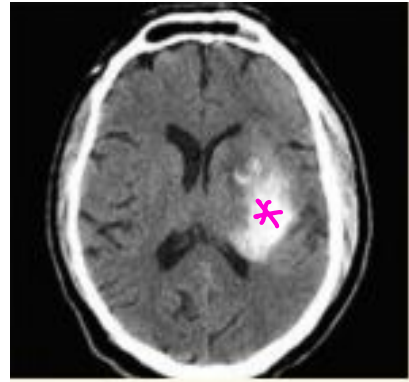
11. A 60-year-old hypertensive man complains of face, arm weakness and inability to speak. Urgent NCCT head is shown below. Which of the following interventions is the first step in management of this patient?

(a) N~~i~~cardipine Target ~ 140/90

b. Mannitol

c. Craniotomy

d. Dexamethasone



HTN CRISIS
↓
Hemorrhagic
STROKE

* POSTURING

Mannitol CI
Active
CNS bleeding +

A airway
B assess BP

C CHECK when last seen normal

* EDH + POSTORING
SDH

BURR Hole Sx

* Ch. SDH = burr hole Sx

12. A 58-year-old man presents to the emergency department with sudden onset severe retrosternal chest pain associated with diaphoresis and nausea. Electrocardiogram shows ST segment elevation in leads II, III, and aVF. On examination, his blood pressure is 70/50 mm Hg with cool extremities, but lung fields are clear on auscultation. What is the next best step in management?

- a. Nitro-glycerine
- b. Diuretics
- c. IV normal saline
- d. Vasopressors

CI: < 90/60
mm Hg

ST↑ lead II, III, aVF

Inf wall STEMI

RV #

* BP ↓ < 90/60 mm Hg

Rx: IVF

Ant wall MI: pulm edema
BP ↓↓ +
NORAD

13. A chronic smoker with COPD is planned for elective abdominal surgery. What intervention best reduces pulmonary complications?

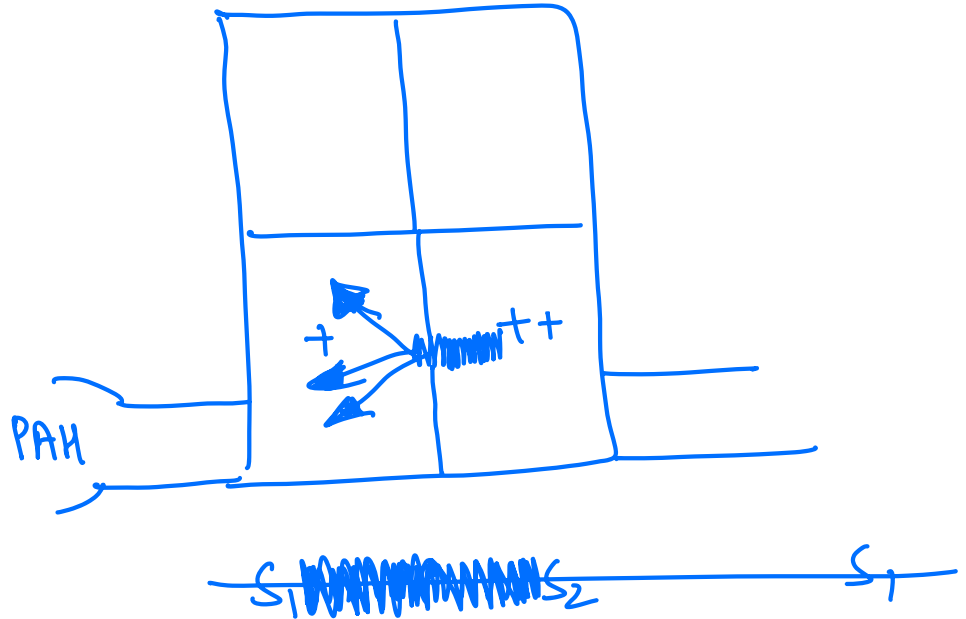
diaphragm #

- a. Prophylactic antibiotics
- b. Smoking cessation with chest physiotherapy
- c. LAMA and LABA
- d. Long term methylxanthines

incentive spirometry

14. What is the characteristic murmur of a ventricular septal defect detected incidentally in a child?

- a. Pansystolic murmur
- b. Ejection systolic murmur
- c. Late systolic murmur
- d. Mid diastolic murmur



15. What is the suspected acid-base disorder based on the ABG analysis?

pH 7.45 ↑
PaCO₂ 28 mmHg ↓ ← HYPERVENTILATION
HCO₃ 20 mEq/L

ROME

- a. Compensated respiratory alkalosis
- b. Compensated respiratory acidosis →
- c. Uncompensated respiratory acidosis
- d. Uncompensated respiratory alkalosis

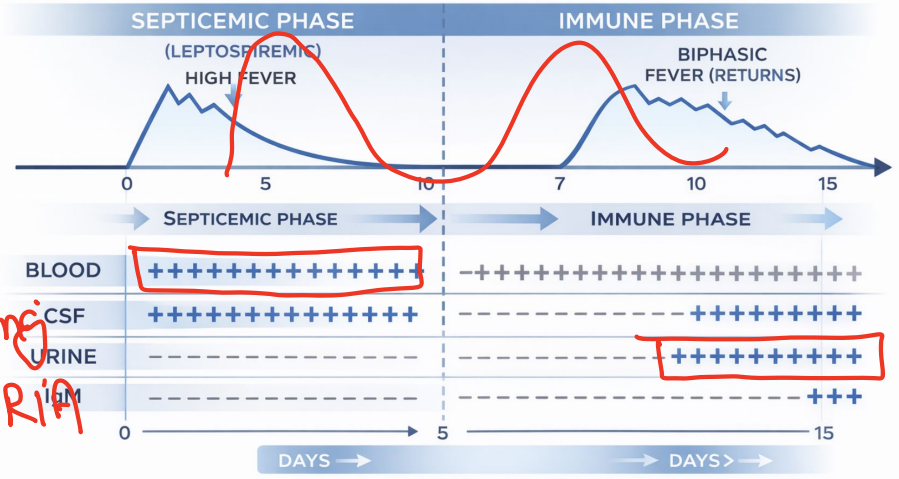
CO₂ ↑ Acidic Molecule: H₂CO₃

└ pH = 7.48 pCO₂ = 28 HCO₃ = 20

16. A 35-year-old man presents with high-grade fever, severe myalgia (predominantly calf pain), and redness of eyes for the last 4 days. He gives a history of wading through flood water one week ago. On examination, conjunctival suffusion is noted. There is no jaundice or renal impairment at present. This clinical presentation most likely corresponds to which phase of leptospirosis?

- a. Incubation phase
- b. Septicemic phase**
- c. Immune phase
- d. Weil's disease

LEPTOSPIROSIS TIMELINE



↓
 ✓ Liver #: bleeding
 ✓ Kidney #: ANURIA

leptospirosis ICTEROHEMORRHAGICAE

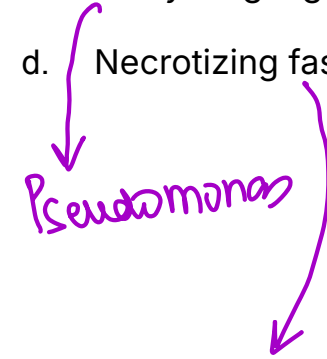
17. A 48-year-old woman with a 10-year history of rheumatoid arthritis (anti-CCP positive) presents with a rapidly progressive, extremely painful ulcer over the anterior aspect of the shin. The lesion began as a pustule and progressed to a deep ulcer with a necrotic black eschar and violaceous undermined margins. There is no history of trauma or diabetes. What is the most likely diagnosis?

a. Cutaneous TB *Lupus Vulgaris: Red brown lesions: FACE*

b. Pyoderma gangrenosum

c. Ecthyma gangrenosum

d. Necrotizing fasciitis



Purple

purple

lesions on shin

*Erythema
Nodosum
(PAINFUL)*

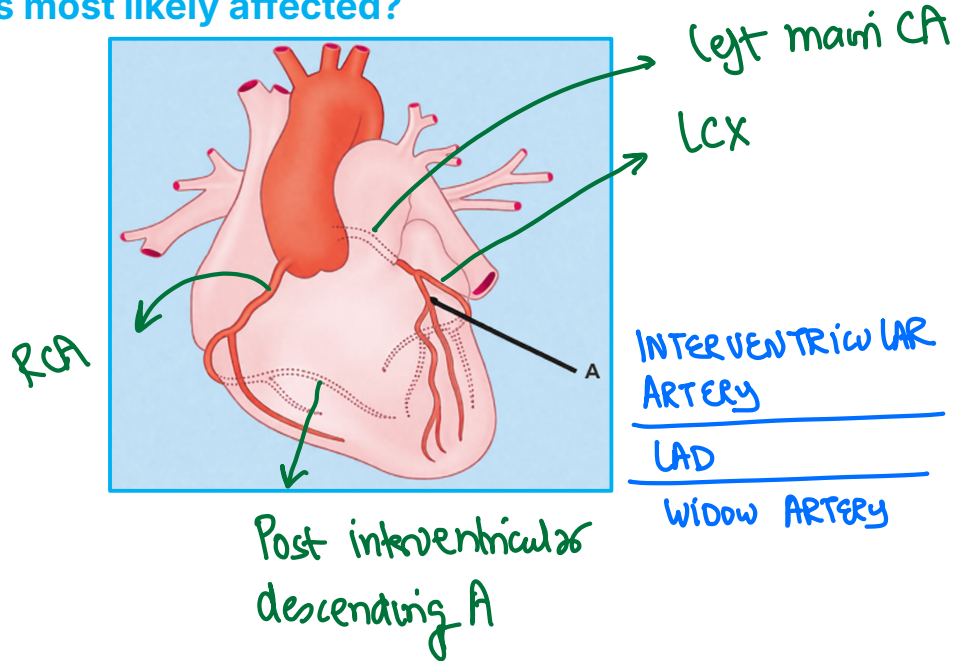
ULCER Margins
*✓ PYODERMA
GANGREOSUM*

- IBD, RA



18. A patient had an occlusion of the artery marked as "A" in the given image. Which part of the heart is most likely affected?

- a. Anterior wall
- b. Posterior wall
- c. Inferior wall
- d. Lateral wall



19. A 35-year-old man presents with headache and neck stiffness for 5 days. Lumbar puncture reveals the following CSF findings: 90% lymphocytes and 10% neutrophils with CSF glucose: 40 mg/dL (Plasma glucose: 100 mg/dL), protein is 1 g/dL. What is the most likely diagnosis?

- a. Viral meningitis
- b. Bacterial meningitis
- c. Fungal meningitis
- d. Tubercular meningitis

* lymphocytes : ↑
* $\frac{\text{CSF glucose}}{\text{plasma glucose}}$: 0.4 (< 0.6)
* protein 15-45mg : 1g/dL

② CSF glucose

VIRAL | TB | malignancy | DRECSLER | UREMIA

*

20. A 40-year-old man presents to the emergency department with sudden onset severe central chest pain radiating to the left arm and jaw for the past 1 hour. The pain is associated with profuse sweating and nausea. He is a known smoker with no prior cardiac history. ECG is shown below. What is the diagnosis?

a. Acute pericarditis

REST

b. Stable angina

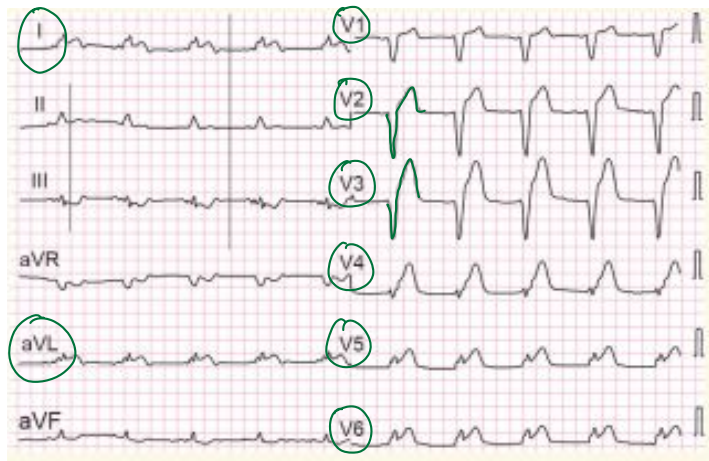
ECG (n)

c. Myocardial infarction

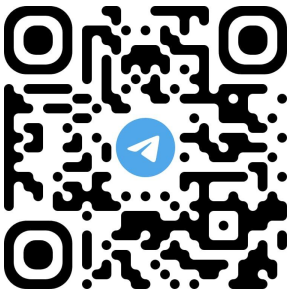
d. Unstable angina

ST↓

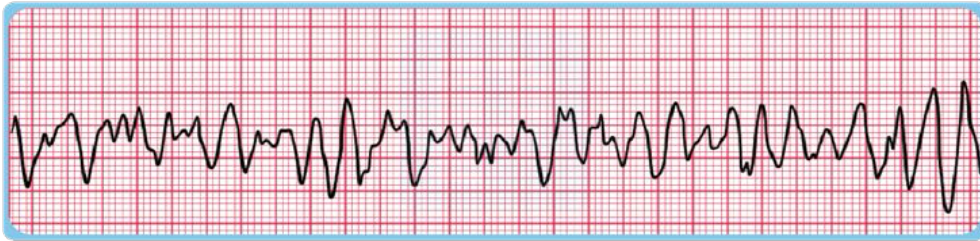
TMT
ST↓



Extensive
Ant wall
STEMI



21. 60 year old patient known case of triple vessel disease is brought to ER in unconscious state. Pulse is not palpable, BP is crashing and no response is elicited from patient when called out by name. ECG is shown below. What is the next step in management of this patient?



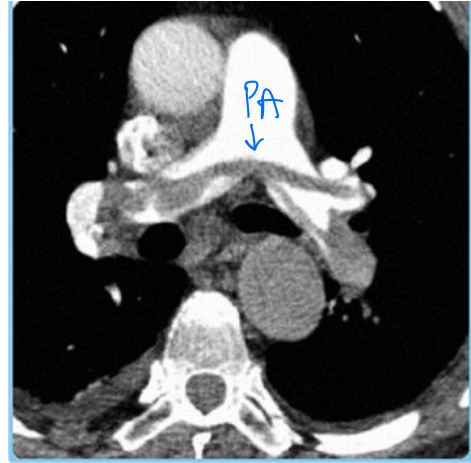
V. FIBRILLATION

- a. Secure IV and give adrenaline 1 mg diluted to 1:10000 as soon as possible ASYSTOLE
- b. Secure IV line and give magnesium sulphate 2 g IV over 15 minutes T.D.P
- c. Attach defibrillator leads and intubate the patient
- d. Attach defibrillator leads and give chest compressions = 30:2

Immobilization : DVT: PE ↑

22. A 62 year woman underwent a total hysterectomy with bilateral salpingo oophorectomy. Day 2 post-op she develops with sudden onset of dyspnea and chest pain. CT angiogram is shown below. Which of the following correctly identifies the pathophysiology of disease process?

- a. Increased pulmonary compliance *emphysema*
- b. Decreased alveolar-arterial oxygen gradient
- c. Increased physiologic dead space
- d. Decreased vital capacity



↓ Oat cell Ce lung: SIADH

23. A 65 year man diagnosed with lung cancer is having headache, confusion and altered sensorium. NCCT head is normal. Serum sodium 120 meq and potassium is 4.0 meq/L. Which of the following is correct about this patient?

a. Hypovolemic hyponatremia

b. Euvolemic hyponatremia

c. Hypervolemic hyponatremia

d. Hypertonic hyponatremia

TBW ↑ TBS (n)

TBW ↑↑ TBS ↑

aldosterone +

CHF, CLD, CKD

CIRRHOSIS

24. A 58 y/o woman with sepsis is admitted to ICU. You have put a central line in the patient after which sudden onset respiratory distress is noted. What is the next step in management of this patient?

AIR EMBOLISM

pneumothorax Traumatic

- a. Turn immediately to left lateral decubitus position
- b. Perform CXR
- c. Insert wide bore needle in 2nd intercostal space in MCL
- d. Insert wide bore needle in 5th intercostal space in MAL

TENSIDN

SBP ↓↓

JVP ↑

mediastinal shift

RU: LOBAR Pneumonia

26. A 65-year-old man is being treated for high grade fever, SOB and rusty sputum for past 3 days . O/E Pulse 110/min, RR 36/min, BP 100/60 mm Hg and he is disoriented. Percussion reveals dull note in right inframammary and infra-axillary areas. Auscultation reveals bronchial breathing in these areas. Which is correct management?

- a. Start IV ampicillin-sulbactam with azithromycin
- b. Start IV ceftriaxone with vancomycin
- c. Oral amoxicillin with clavulanic acid and azithromycin
- d. Oral moxifloxacin

* CURB - 65 = 3

CONFUSION ✓

~~BUN ↑~~ ✓

RR > 20/min

~~BP < 90/60~~ ✓

age ~ 65 yrs ✓

27. A 32-year-old man is brought in by paramedics after being involved in a motor vehicle collision. He has multiple fractures and is hypotensive and tachycardic. Heart sounds are normal, but his neck veins are distended and there are decreased breath sounds on the left side with tracheal shift to the right. Which of the following should be done immediately?

- a. Chest x-ray in the upright position
- b. Chest tube placement in the fifth intercostal space along the midaxillary line
- c. Needle thoracostomy in the second intercostal space along the midclavicular line
- d. Emergency thoracotomy

* BP ↓

* S₁ S₂ (n)

* JVP ↑

* ⊖ breath sound

↓
Child | Adult



28. 30 year old HIV patient is admitted with diagnosis of Lobar pneumonia. CD4 count is 55 cells/ cu.mm. Which organism is likely responsible for this presentation?

INTERSTITIAL Pneumonia

- a. ~~Pneumocystis jiroveci~~
- b. Pneumococcus
- c. Legionella pneumophila
- d. Staph. Aureus

29. A 58-year-old woman with shortness of breath has a pleural effusion. Thoracentesis yields:

Total protein (serum)	6.8 g/dL
LDH (Serum)	75 U/L
Glucose (serum)	120 mg/dL
Total Protein (effusion)	2.0 g/dL
LDH (effusion)	25 U/L
Glucose (effusion)	90 mg/dL

< 0.6

$$\frac{\text{PF LDH}}{25/75} = 0.3$$

* < 0.5

$$\frac{\text{PF protein}}{2/6.8} = 0.3$$

What is the most likely underlying diagnosis?

- a. Nephrotic syndrome
- b. Rheumatoid arthritis
- c. Tuberculosis
- d. Lung cancer

T
E
E
E

|

inflammation

30. A 35-year-old man presents with complaints of wheezing and shortness of breath that have worsened over the past few weeks. He notes that his symptoms often occur at night and are triggered by exposure to dust and exercise. Spirometry shows a FEV₁/FVC ratio of 65%. After using a short-acting β 2-agonist, his FEV₁ increases by 20%. Which of the following findings would most likely be observed in this patient?

- a. Increased total lung capacity
- b. Decreased DLCO
- c. Increased forced vital capacity
- d. Decreased residual volume

DLCO \uparrow

RV \uparrow

FEV₁ / FVC < 0.7

* ASTHMA

Air Trapping

TLC > 6L

31. Which of the following medications can worsen AKI in a volume depleted patient

- a. Beta-blockers
- b. Angiotensin-Converting Enzyme inhibitors
- c. SGLT2 inhibitors
- d. SSRI

* UTi, Mgi

BP ↓↓

↓ urine output
↓ GFR



32. A 57-year-old male patient comes to the clinic with complaints of weakness, restlessness, and chest pain. On examination, his blood pressure is found to be 90/60 mmhg, his heart sounds are muffled, and his neck veins are distended. What is the typical JVP finding in this patient?

- a. Absent a wave
- b. Prominent a wave
- c. Rapid y descent
- d. Absent y descent

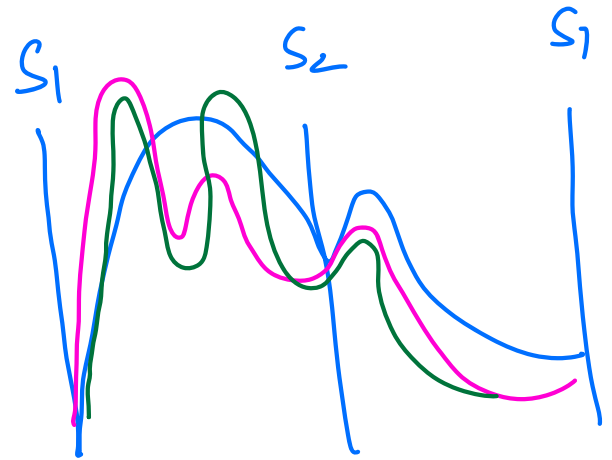
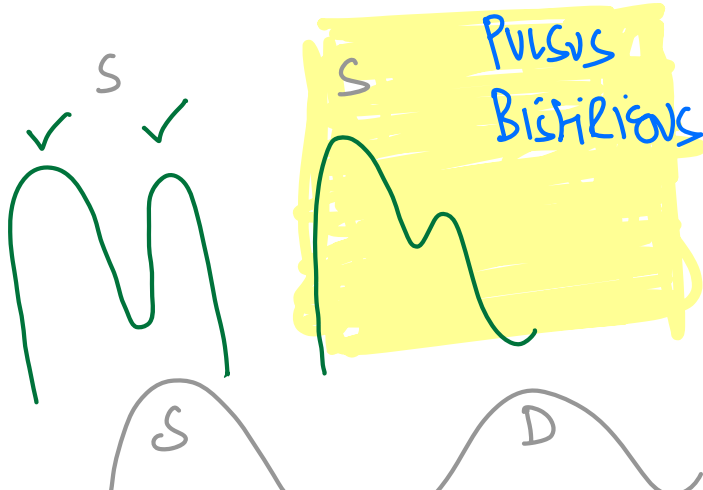
Cardiac
Tamponade

step x, absent y

33. Pulsus paradoxus is seen in all of the following except:

- a. COPD ✓
- b. Tension pneumothorax ✓
- c. Hypertrophic cardiomyopathy
- d. Cardiac tamponade ✓

SBP ↓↓ > 12 mm Hg
on deep inspiration

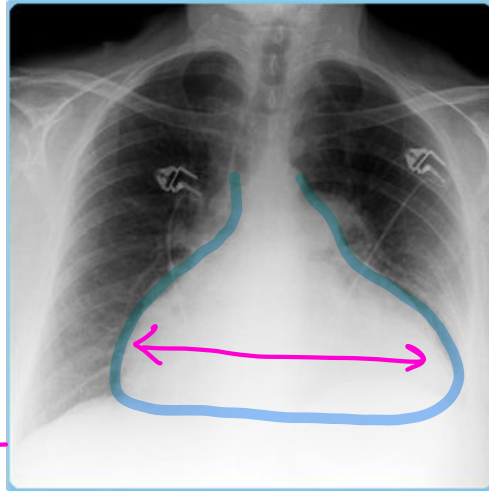


34. A 50-year-old man with a history of tuberculosis now complained of abdominal distension and pedal edema. On examination, his neck veins are prominent. His chest x-ray is given below. Which of the following findings will

* be likely seen in this patient?

- a. Pulsus bisferiens → HCM
- b. Kussmaul breathing DKA
- c. SBP falls from 80 mmHg to 60 mmHg
- d. Fine crepitations LHF ↑

pulsus paradoxus



CT RATIO ↑
Cardiac
Temporade

35. A patient with a large pericardial effusion is experiencing significant hemodynamic compromise. Which combination of ECG findings is most likely present?

- a. Tachycardia, ST-elevation, and QRS alternans
- b. Bradycardia, normal QRS voltage, and T-wave inversions
- c. Sinus tachycardia, low QRS voltage, and electrical alternans
- d. Atrial fibrillation with a slow ventricular response

36. A 25-year-old male presents with complaints of shortness of breath. Pulse is 100/min, BP 130/100 mmHg and RR 20/min. CXR shows cavity in right upper zone and echocardiography confirms a pericardial effusion. Sputum smear is positive for AFB. Which of the following is the most appropriate next step in management?

Pulm Oedema

- a. Administering high-dose intravenous diuretics.
- ~~b.~~ Scheduling a planned pericardiocentesis for CBNAAT
- ~~c.~~ Perform an urgent pericardiocentesis
- d. Start ATT and monitor with serial echocardiograms

BP ↓↓↓

TB = pericardial effusion

*

37. A 60-year-old man with a history of heart failure presents with worsening edema and jugular venous distention. You observe a steep x and steep y descent in the jugular venous waveform. Which of the following conditions is most likely responsible for these findings? *

- a. Constrictive pericarditis
- b. Tricuspid regurgitation
- c. Pericardial tamponade
- d. Acute Pericarditis

Steep x steep y = CP

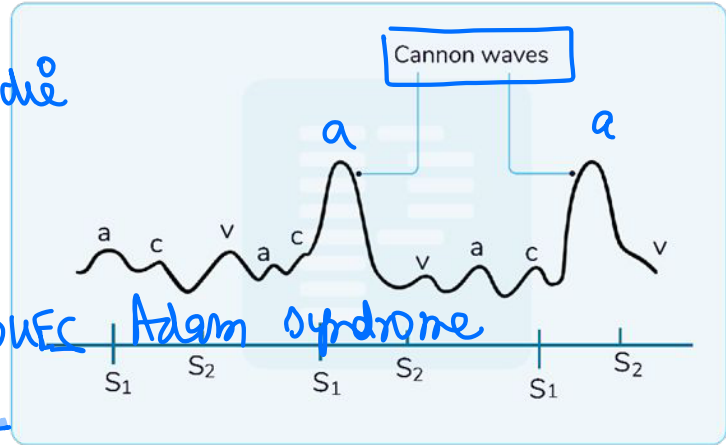
⊖ x steep y = TR

Steep x ⊖ y = C.T

38. A 65-year-old man presents with palpitations and lightheadedness. His ECG shows an unequal number of P waves and R waves and his jugular venous pressure tracing is shown below. Which of the following conditions is responsible for this finding?

- a. Atrial fibrillation
- b. Complete heart block
- c. Tricuspid stenosis
- d. Supraventricular tachycardia

Bradycardia



CANON a

HR ↓ : CHB, STONEFC Adam syndrome

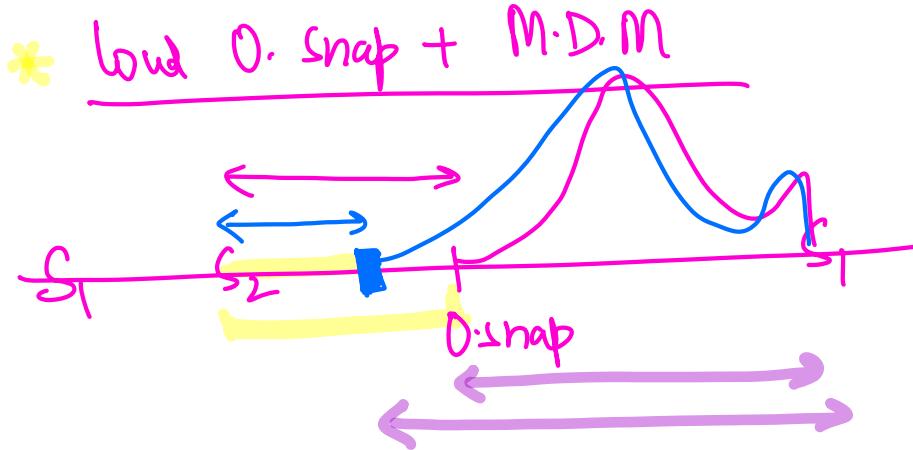
HR ↑ : SVT/VT

Wide complex

Narrow qRS

39. Severity of mitral stenosis is best assessed by which of the following?

- a. Loud P2
- b. S2- opening gap**
- c. Intensity of mid diastolic murmur with presystolic accentuation
- d. Loud S1

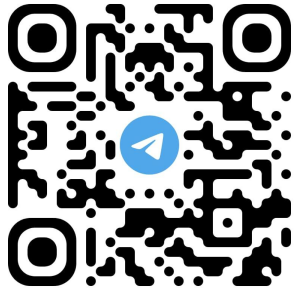


40. 30 year old patient with features of Ventricular failure has pan-systolic murmur that increases in intensity with loud inspiration. Diagnosis is? =

- a. Tricuspid stenosis
- b. Mitral stenosis
- c. Tricuspid Regurgitation
- d. Mitral Regurgitation

* PSM = MR, TR, VSD

* All murmur on Rt side of
louder \bar{c} inspiration



41. A soft, low-pitched sound in early diastole after S2, heard best with the bell at the apex in a 30-year-old pregnant woman. Most likely interpretation?

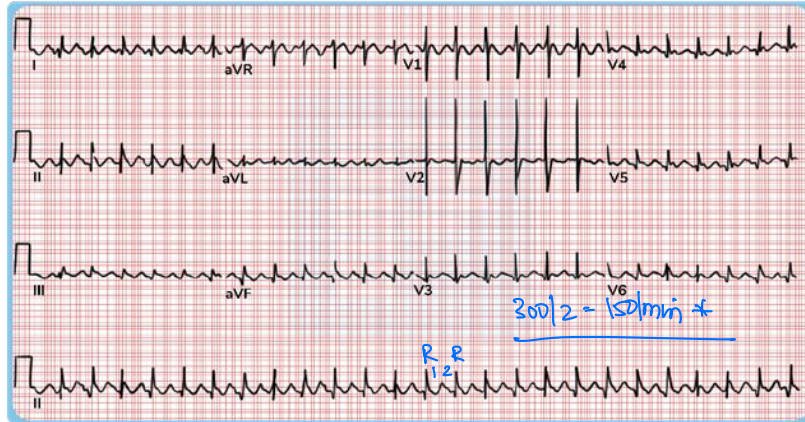
- a. Normal physiological variant due to increased blood volume
- b. Sign of heart failure requiring immediate intervention
- c. Indicates a stiff, hypertrophic ventricle
- d. Suggests severe mitral or tricuspid valve stenosis

$S_3 = \text{Pregnancy, children, } < 35 \text{ yrs}$

42. 30-year-old female patient presents to the ER with palpitations. She is diaphoretic, tachycardic with cool extremities and complains of impending blackout. His ECG is given below. Given the patient's condition, what is the most appropriate immediate management for this patient?

- a. Amiodarone
- b. Adenosine
- c. Defibrillation
- d. Cardioversion

- PVC
- VFIB



A-F with TR *

43. A 55-year-old man is noted to have congestive heart failure with with reduced ejection fraction. Which of the following drugs would significantly lower his risk of mortality.

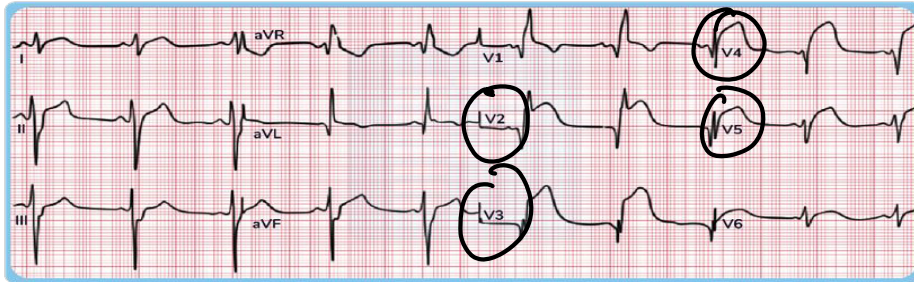
- a. ARNI
- b. Beta blockers + Verapamil
- c. ACEI with Verapamil
- d. SGLT2i

HR ↓ HR ↓

Ch. HF : 1. ARNI > A+B
2. SGLT2i
3. MRA

digoxin

44. A 62-year-old man with hypertension presents with sudden chest pain and dyspnea 2 hours ago. Vitals: BP 100/60 mmHg, HR 110/min, RR 22/min .ECG is shown below. The hospital cannot perform PCI; the nearest cath lab is 20 minutes away. What is the best next step in management?



- a. Transfer the patient for PCI
- b. Start Aspirin and start fibrinolysis with alteplase within 30 minutes of arrival
- c. Start fibrinolysis with Streptokinase within 60 minutes of arrival
- d. Arrange for emergency valvular surgery

45. A 42-year-old woman loses consciousness at an outdoor ceremony when excited. Before the event, she felt lightheaded, nauseated, and had tunnel vision; she then briefly fainted and woke alert. Medical history: diabetes, GERD; meds: metformin, omeprazole. No postural BP change. Exam now is normal. Most likely diagnosis?

- a. Arrhythmia
- b. Orthostatic hypotension
- c. Seizure
- d. Vasovagal syncope

HTN, unconscious $\begin{cases} \text{AIC} \\ \text{Hemorrhagic stroke} \\ \text{PRES} \end{cases}$

46. A 55-year-old male presents with severe headache, nausea, and vision loss. His blood pressure is recorded at 190/130 mmHg. Neurological examination reveals altered mental status. MRI head is done. Diagnosis?

- a. Hypertensive urgency
- b. Malignant hypertension
- c. Posterior reversible encephalopathy syndrome
- d. Essential Hypertension



CEREBRAL OEDEMA

47. Alcoholic comes with complaints of severe epigastric pain and vomiting. On examination rebound tenderness is noted with guarding and rigidity of anterior abdominal wall. Diagnosis is? ==

- (a) Peritonitis
- b. Boerhaave syndrome
- c. Mallory weiss syndrome
- d. Portal hypertension

MACULER TRIAD

PERFORATIONS of gut

c, d = hematemesis



48. Which of the following is not correct about Renal tubular acidosis type 1:

- a. Hypokalemia
- b. Hypercalciuria
- c. Serum Bicarbonate < 15 meq
- d. Urine pH < 5.5

RTA 1,2

↓
acidic URINE

α INTERCALATED
* impaired H⁺ excretion
* Ca⁺⁺ in URINE ↑

RTA: K⁺ ↑; RTA 4

49. Alcoholic presents in unconscious state. His wife reports that he was passing black colored stools for past 2 days. His RBS is 65 mg/dl and INR is 10. Which of the following should be next step in management of this patient?

- a. IV 25% Dextrose + IV thiamine
- b. IV thiamine + IV 25% dextrose
- c. IV FFP and Lactulose via NG tube
- d. IV FFP and IV Vitamin K1 5 mg

binds to NH_3^+

X WE = CoA

Cirrhosis = Hepatic failure

50. 35-year-old woman presents to the clinic with fatigue, weight loss, muscle weakness, and hyperpigmentation of the skin. She also reports occasional dizziness and light-headedness, especially when standing up. Blood pressure is 90/60 mmHg, and her serum sodium is 130 mEq/L, potassium is 5.6 mEq/L, and cortisol levels are low. Which of the following is the most likely diagnosis?

- a. Cushing's syndrome
- b. Addison's disease
- c. Conn's syndrome
- d. Hypothyroidism

ALDOSTERONE ↓
CORTISOL ↓
ACTH ↑

51. 45-year-old woman with a history of Graves' disease presents to the emergency department with a fever of 103.1°F, palpitations, tremors, and severe agitation. On physical examination, she has a heart rate of 140 bpm, blood pressure of 160/100 mmHg, and a fine tremor in her hands. Lab results reveal elevated free T4 and suppressed TSH. Which of the following is the most likely diagnosis?

a. Myxedema coma

b. Thyroid storm

c. Subacute thyroiditis

d. Pheochromocytoma

↓ TEMP ↓ T₄
↑ TEMP ↑ T₄

T₄ ↑ ↑ T₃

52. 45-year-old woman presented to the OPD with persistent abdominal pain, episodes of diarrhoea, and flushing. Laboratory tests reveal elevated serum calcium levels. A family history is notable for her sister having a parathyroid adenoma and her mother being diagnosed with medullary thyroid carcinoma. Which of the following is the most likely diagnosis based on the clinical presentation and family history?

- a. Multiple endocrine neoplasia type 1
- b. Multiple endocrine neoplasia type 2
- c. Multiple endocrine neoplasia type 3
- d. Multiple endocrine neoplasia type 4

→ MCT +
→ parathyroid adenoma +
→ pheochromocytoma^M
→ carcinoid Tumors

53. A 42-year-old man is diagnosed with a pheochromocytoma after presenting with episodic hypertension, palpitations, and headaches. The endocrinologist recommends preoperative management to control his blood pressure and minimize the risk of hypertensive crises during surgery. Which of the following is the correct pharmacological management approach for this patient?

- a. Initiate treatment with beta-blockers alone
- b. Initiate treatment with alpha-blockers followed by beta-blockers
- c. Start with calcium channel blockers only
- d. Use diuretics as the first-line treatment

α + β

54. Which of the following conditions is not typically associated with hypercalcemia?

- a. Primary hyperparathyroidism
- b. Multiple Myeloma
- c. Vitamin D intoxication
- d. Chronic kidney disease

vit D₃ ↓

✓
↑ PTH ↑ Ca
bony lytic lesions:
vit D₃ ↑: Ca⁺ ↑

CRAB ↑ Ca⁺

55. Which of the following features is not associated with Cushing's syndrome?

- a. Hyperkalemia
- b. Central obesity ✓
- c. Proximal myopathy ✓
- d. Metabolic Alkalosis ✓

Hypokalemic
alkalosis

✓
56. Which of the following investigations is first line for a patient with severe hematochezia with hypotension on admission.

- a. UGIE
- b. Colonoscopy
- c. Sigmoidoscopy
- d. Proctoscopy

FRESH blood in stool
+ BP ↓↓ : ? PUD

57. Which of the following is best intervention for patient with non bleeding esophageal varices ?

- a. Endoscopic variceal ligation
- b. Transjugular intrahepatic portosystemic shunting
- c. Octreotide
- d. Nadolol



58. 35-year-old woman presented to the OPD with recurrent migraines that occur several times per month, significantly affecting her quality of life. She reports that headaches are often accompanied by nausea and sensitivity to light. She has been using sumatriptan for acute attacks, which provides relief but does not prevent the migraines. Which of the following medications is most appropriate for prophylaxis of her migraines?

- a. Sumatriptan nasal spray *acute*
- b. Acetaminophen *acute*
- c. Galcanezumab *sc once/month*
- d. Oral sumatriptan *acute*

59. 45-year-old woman presents with symptoms of Cushing syndrome, including weight gain, hypertension, and glucose intolerance. Which of the following treatment options is considered the first-line approach for managing ACTH independent cushing syndrome ?

- a. Transsphenoidal resection of pituitary adenoma
- b. Adrenalectomy
- c. Radiation therapy
- d. Medical therapy with Metyrapone

✓
ACTH dependant



60. 28-year-old right-handed man is brought to the ER after experiencing a brief episode of abnormal jerking movements of his right hand and face, followed by confusion lasting several minutes. His wife reports that he remained conscious during the episode but was unable to speak clearly. EEG shows focal epileptiform discharges in the left frontal region. Which of the following is the most appropriate initial pharmacological management for this patient?

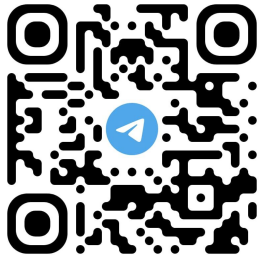
- a. IV Lorazepam
- b. IV Valproate
- c. Oral Levetiracetam
- d. Oral Carbamazepine

focal seizures

61. 4-year-old boy is brought to the clinic by his parents because of difficulty in walking and frequent falls. His parents report that he uses his hands to push himself up from the floor. On examination, the child has pseudohypertrophy of the calves and a positive Gowers' sign. Which of the following is the most appropriate next step to confirm the diagnosis?

- a. Muscle biopsy
- b. Electromyography (EMG)
- c. CK-MM levels
- d. Gene sequencing

DMD?
1. CK-MM ↑
2. gene sequencing
or EMG : IHC



62. 22-year-old man presents with progressive weakness of both lower limbs for the past 3 days. He reports a recent episode of diarrhea about 2 weeks ago that resolved spontaneously. On examination, there is symmetric flaccid paralysis of both legs with absent deep tendon reflexes. Sensory examination is normal. Which of the following tests will be done next to confirm the diagnosis?

- a. Lumbar puncture for cyto-albuminocytological dissociation
- b. NCV for demyelination of peripheral nerves and nerve roots
- c. Stool ELISA for C. Jejuni
- d. Anti GM1 antibody titers

✓
GBS: Δ

63. 50-year-old woman presents with severe, sharp, electric shock-like pain on the right side of her face. The pain is episodic, lasting for a few seconds, and is triggered by activities such as brushing teeth, chewing, or even light touch. The episodes have become more frequent over the last few months. Neurological examination is normal. MRI of the brain is unremarkable. What is the most appropriate first-line treatment for this condition?

- a. 100% oxygen followed by injection sumatriptan
- b. Carbamazepine
- c. Baclofen
- d. Amitriptyline

TRIGEMINAL
NEURALGIA

64. 72-year-old man is brought to the clinic by his daughter due to forgetfulness and difficulty managing daily tasks for the past 6 months. MMSE score is 22/30. Diagnosis is?

- a. Mild cognitive impairment
- b. Alzheimer disease
- c. Parkinson disease
- d. Huntington disease

→ PET + UA
SCAN

MMSE : $\frac{<24}{30}$
dementia

65. 52-year-old man with a history of type 2 diabetes mellitus presents for a routine follow-up. His physician wants to assess his long-term glycemic control and orders a hemoglobin A1c (HbA1c) test. Which of the following vacutainers is most appropriate for collecting a blood sample for HbA1c estimation?

a. Yellow

b. Grey

← glu cone

c. Lavender

d. Blue

66. 68-year-old man with a history of type 2 diabetes presents to the emergency department with confusion, excessive thirst, and polyuria for the past few days. On examination, he is severely dehydrated, with dry mucous membranes and a heart rate of 110 bpm. His blood glucose is 850 mg/dL, serum osmolality is elevated, and there are no ketones in his urine. Which of the following is the most likely diagnosis?

- a. ~~Diabetic ketoacidosis~~
- b. Hyperosmolar hyperglycemic state
- c. Hypoglycemia
- d. Lactic acidosis

MCTD

67. Which of the following antibodies is used for diagnosis of mixed connective tissue disorder?

- a. U1 ribonucleoprotein antibody *
- b. Anti ribosomal -P antibody → Psychosis in SLE
- c. Anti centromere antibody
- d. Anti microsomal antibody

SLE = lupus Nephritis

68. Which of the following is leading cause of death in patient who is anti topoisomerase antibody positive and presented with raynaud's phenomenon ,
Leather like skin and tendon friction rubs?

- a. Hypertensive scleroderma crisis
- b. Pulmonary artery hypertension
- c. Ureteral fibrosis leading to uremia
- d. Recurrent microaspiration due to GERD

SCLERODERMA



69. Which of the following investigations should be done for diagnosis of Gluten enteropathy associated skin manifestation that presents as pruritic papules on elbows and knees?

- a. Anti Epidermal transglutaminase levels
- b. Anti Tissue transglutaminase levels
- c. Anti Gliadin antibodies
- d. Anti Desmoglein 3 antibodies

DH



==

70. 15 year old boy is having poor scholastic performance. On examination dysarthria, dystonia and tremors are noted in upper extremities. His elder brother died due to some neurological illness. Slit lamp examination shows KF ring. Which of the following investigation is best to confirm the diagnosis of this patient?

- a. Liver biopsy with estimation of hepatic copper content
- b. Serum ceruloplasmin levels
- c. 24 hour urinary copper levels
- d. MRI brain

71. Which of the following body systems is most commonly involved in a woman who presented with pyrexia of unknown origin and is ANA positive at >1:80 titers?

SLE

- a. Skin
- b. Musculoskeletal
- c. Kidney
- d. Hematological

72. Which of the following is correct about diagnosis of sepsis

- a. Rise of SOFA score > 2 points above baseline on serial examination
- b. SIRS plus 1 positive blood ~~culture~~
- c. SIRS plus 2 positive blood culture
- d. SIRS plus BP < 90/60 mm Hg persisting for > 1 hour in spite of vasopressor support

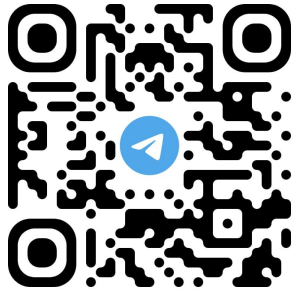
* 73. 72-year-old woman presented with difficulty walking, frequent falls, and urinary incontinence. Her cognitive evaluation shows impairments in executive function and memory. Her gait is characterized by a wide base and shuffling step. What is the most likely diagnosis?

- a. Lewy Body Dementia
- b. Fronto-temporal dementia
- c. Normal Pressure Hydrocephalus
- d. Alzheimer's disease

✓ ✓ ✓
- WACKY
- WOBBLY
- WET

74. Which of the following statements about Bell's palsy is false?

- a. Bell's palsy is typically a unilateral facial nerve paralysis ✓
- b. Lower motor neuron lesion of facial nerve ✓
- c. Bell's palsy is associated with contralateral facial paralysis ✓
- d. Corticosteroids are commonly used as part of the initial treatment



75. 30 year old lady presents with following skin lesions and difficulty in climbing stairs. CPK MM is elevated and MRI guided muscle biopsy reveals perimysial inflammation and perifascicular atrophy. Diagnosis is?

- a. Dermatomyositis ↑ 6e ovary
- b. Polymyositis
- c. Anti synthetase syndrome
- d. Inclusion body myositis



GOTTSON
Papules

Anti Mi-2

Anti TIF

Anti MDA

THANK YOU