MEDICINE

1. Which of the following is seen in Conn syndrome?

a. Hypernatremia — Na conc (n)

b. Pedal edema — no net gain of H_2O

c. Postural hypotension — addison

(d.) Polyuria
PolyDipsiA

↓
Adrenal Adenoma
↑ALDOSTERONE
Na ++
H_2O ++ | A.N.P : natriuresis
RA ++

ALDOSTERONE ↑
1° → BAH >> CONN
2° → PiH, CHF, CKD, CLD
+RAAS : Pedal edema ++

IOC: CONN: Saline infusion Test
CT Abdomen ; ADRENAL vein sampling : localization

2. 35-year-old female presents with bilateral ptosis and fatigue. On examination with flashlight both pupils are dilated. DTR and superficial reflexes are normal. Sensory and cerebellar examination is normal. Which of the following investigations should be done first in this case?

a. MRI brain

b. Single fiber electromyography

c. Tensilon test

d. Ice pack test

* Occulomotor N palsy B/L
midbrain #
Edinger westphal nuclei

3. 50-year-old man with type 2 DM is having FPG 220 mg/dl and 2-hour PG value of 200 mg/dl. Which of the following explains this elevated fasting glucose levels.

a. Increased hepatic gluconeogenesis ← METFORMIN

b. Decreased peripheral uptake of glucose

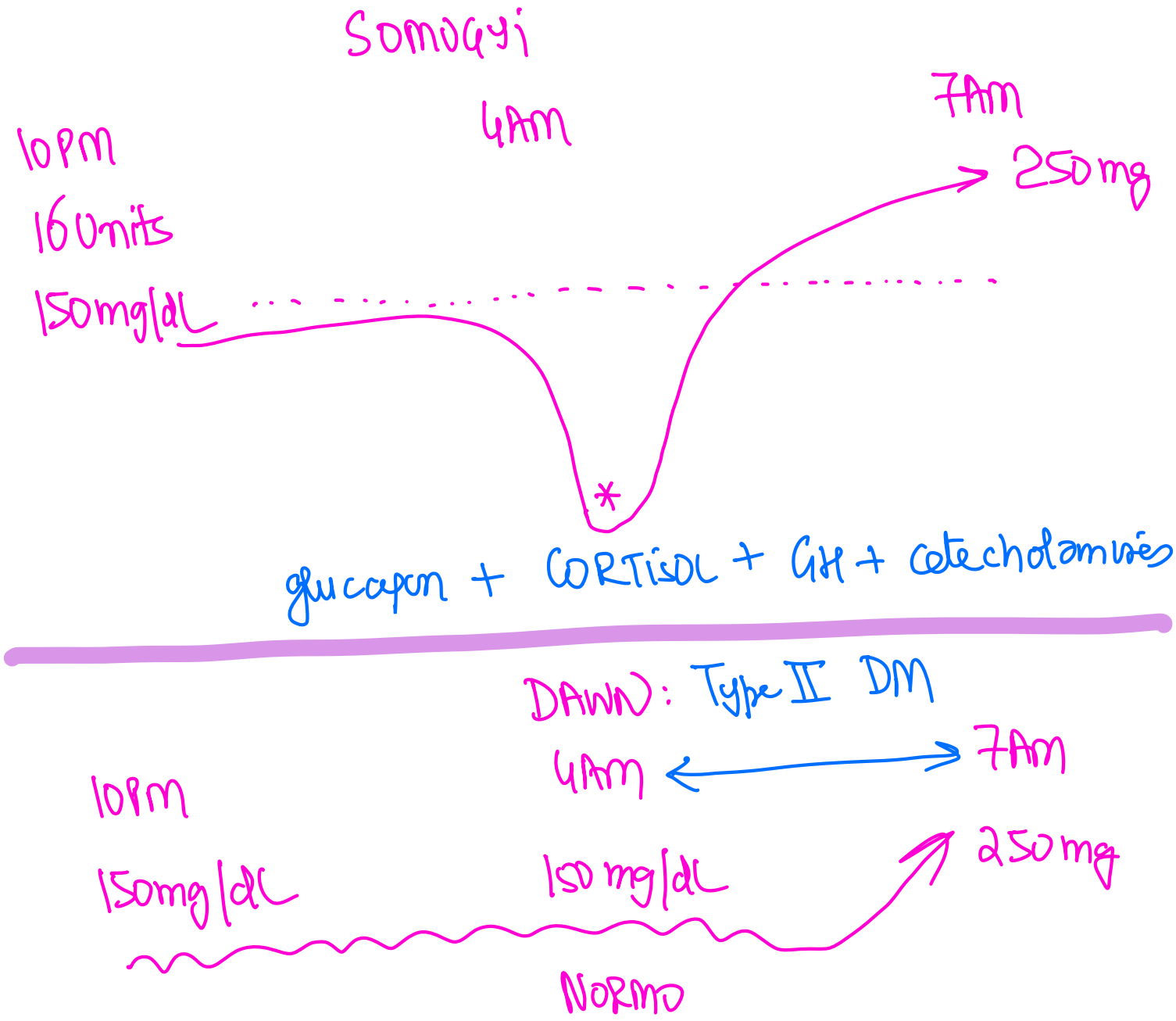
c. Somogyi phenomenon → NOCTURAL HYPOGLYCEMIA

d. Decrease hepatic glycogenesis

fasting ⇒ ↑ Hepatic gluconeogenesis

P.P ⇒ insulin Resistance

8368491546 *


Somogyi
10PM
16 Units
150mg/dL
4AM
7AM
250mg
*
glucagon + CORTISOL + GH + catecholamines

DAWN: Type II DM
4AM
7AM
10PM
150mg/dL
150 mg/dL
250mg
NORMO

4. A 34-year-old man with untreated HIV (CD4 count 45/µL) presents with headache, fever, nausea, vomiting, and confusion. On examination, there is neck stiffness and altered mental status. Lumbar puncture shows elevated opening pressure, low CSF glucose, and encapsulated diplococci on India ink staining. What is the most appropriate initial treatment?

a. Intravenous amphotericin B plus fluconazole

b. Intravenous acyclovir

c. Intravenous amphotericin B plus flucytosine

d. Ceftriaxone with vancomycin

5. 50-year-old man presents with chronic diarrhea, weight loss, arthralgia and hyperpigmentation on extensor surfaces and flexural area. On examination systolic murmur is heard in aortic area. Biopsy of small intestine is shown below. Which of the following statements are correct about this patient condition? *

a. Caused by gluten allergy → Celiac sprue

b. Presents with culture negative endocarditis

c. Polyps in jejunum → PJS

d. Associated with enteropathy associated T cell lymphoma EATL: Celiac Sprue

PAS + macrophages

Whipple disease

6. 50-year-old man with Type 2 DM underwent PCI with stenting. Physician wants to maintain his blood sugar with rapid acting insulin. Which of following should be started?

a. Glargine — BASAL

b. Glulisine — Rapid acting

c. Detemir — BASAL

d. Icodec

degludec = 42 HR
glargine = 24 HOUR
ICODEC = 168 HOUR

7. You are managing with Addisonian crisis with dexamethasone. Which of the following will not improve with treatment?

→ BP ↓ Sugar ↓

DEXONA: CORTISOL ++
ENac +

a. Hyponatremia ✓

b. Hyperkalemia

c. Hypoglycemia ✓

d. Postural hypotension ✓

* K+ ∿ aldosterone
M = FLUDROCORTISONE
HYDROCORTISONE

↓ CORTISOL
↓ T4

⊖ CONTROL of ADH : SIADH : H_2O ++
loss of
Na ↓

8. 5-year-old child has repeated episodes of vacant stare and poor school performance. EEG is shown below. Which of the following drugs can worsen this patient?

a. Carbamazepine
b. Ethosuximide ✓
c. Valproate ✓
d. Lamotrigine

ethosuximide T-Type Ca^{+} channels in THALAMO CORTICAL CIRCUIT

9. 50-year-old man with CKD missed a haemodialysis seen and complaints of vomiting , lethargy, drowisness . Which of the following is most likely to occur in this patient?

a. Metabolic alkalosis with hyperkalemia

b. Metabolic acidosis with hyperkalemia

c. Metabolic alkalosis with normal anion gap metabolic acidosis

d. Metabolic acidosis with hypokalemia

* UREMIA : ⊕ stomach
* M.ACIDOSIS
* K↑

↳ HAGMA

10. Which of the following is used for treatment of malignant pheochromocytoma

a. MIBG scan using I-131

b. Sodium nitroprusside

c. Phentolamine with propranolol

d. Propranolol with phentolamine

NE ++
Epi ++

intra-op HTN crisis pheo Sx

I-131
- GRAVE
- M. pheo chN

I-125
Ca prostrate

* IOC: plasma free metaneph
24 hr urine
fractionated metanephrine

NE
- Adrenal
- paraganglioma

* Epi producing pheochromo: Sipple

CHLOROMA

11. Which of the following clinical features are seen with Acute Myeloid Leukemia?

a. Gum hypertrophy

b. Skin infiltration

c. Lower limb weakness

d. Papilledema

My > M5

CHLOROMA or granulocytic Sarcome

Spinal cord nerve Roots

CNS leukemia : meningismus

1. a, b
2. b, c
3. a, b, c
4. a, b, c, d

collapsing pulse

12. While evaluating pulse of a patient you notice a tapping character when you raise the arm of patient above his head. Which of the following conditions cannot show this presentation?

a. Aortic regurgitation ✓

b. Anaemia ✓

c. Left ventricular failure → PULSUS ALTERNANS

d. Thiamine deficiency BERI-BERI

A ALTERNANS, ANACROTIC
LVF AS

B BISFIRIENS

C CORRIGANS AR

Pistol shots femoral ←

D DICROTIC DCM

13. 10-year-old child is admitted in ICU for abdominal pain and vomiting episodes. ABG shows pH = 7.3, pCO2= 30 mmHg, HCO3=15 meq/L, RBS = 350 mg/dl. Urine Ketostix is 4+. He is managed with 1L saline and insulin infusion 0.1 U/kg per hour and child recovers by day 3. Which of the following is correct about the cause of this presentation?

* Pc M. ACIDOSIS
* RBS > 250mg
* KETONURIA

a. Insulin resistance — TYPE 2

b. Leading cause of death is hyponatremic dehydration — CEREBRAL edema

c. Occurs due to defect of chromosome 6

d. ~~Beta cell hyperplasia~~ — destruction

TYPE 1 DM ⇒ Autoimmune

gene CTL-4A #
Ch 6 #
HLA DR3 DR4

B cell
Zinc Transporters

14. Calcitonin levels are increased in which of the following

a. Hypoparathyroidism

b. Hyperparathyroidism

c. Follicular carcinoma thyroid

d. Digeorge syndrome

PTH: ↑ : Ca+++

Counterregulatory Hormone : Calcitonin +++

TUMOR MARKER

15. 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 with displaced apex beat. Which of the following should be done immediately?

Tension pneumothorax

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

children

16. RHD patient with Mitral stenosis has developed PAH. Which of the following JVP findings will be likely to be seen

a. Large a wave

b. Canon a wave

c. Absent a wave

d. Kussmaul sign

AV dissociation – V.T., PSVT / Complete H. block

A.FiB

COPS Restrict Rt ♥ CP, RCM, Rt HF

17. A 28-year-old marathon runner collapses just before the finish line after consuming large amounts of water during the race. He develops acute onset confusion followed by generalized tonic–clonic seizures. What is the most appropriate immediate management?

Vitals	Labs
BP: 90/60 mm Hg	Serum sodium: 124 mEq/L
Pulse: 112/min	Serum potassium: 3.4 meq/L
RR: 24/min	BUN is 60 mg /dl
SpO_2: 96% on room air	S. creatinine 1.4 mg/dl
GCS: 9/15	

Na+ ↓ (acute onset)

a. Fluid restriction and oral salt tablet

b. Slow correction of sodium over 48 hours at 4-6 mEq/L per 24 hours

c. Slow correction of sodium over 48 hours at 8-10 mEq/L per 24 hours

Oat cell Ca lung → SIADH → chronic Hyponatremia

d. 3% saline bolus

Na ↓

Acute

MARATHON
CONSTRUCTION WORKER

<125

SEIZURES ⊕

100 cc of 3% Saline

Chronic

gradual infusion of 3% Saline

Oat cell Ca lung

<125 SEIZURES +

~~fast~~ correction

☹ : Risk of ODS

TRIDENT SIGN

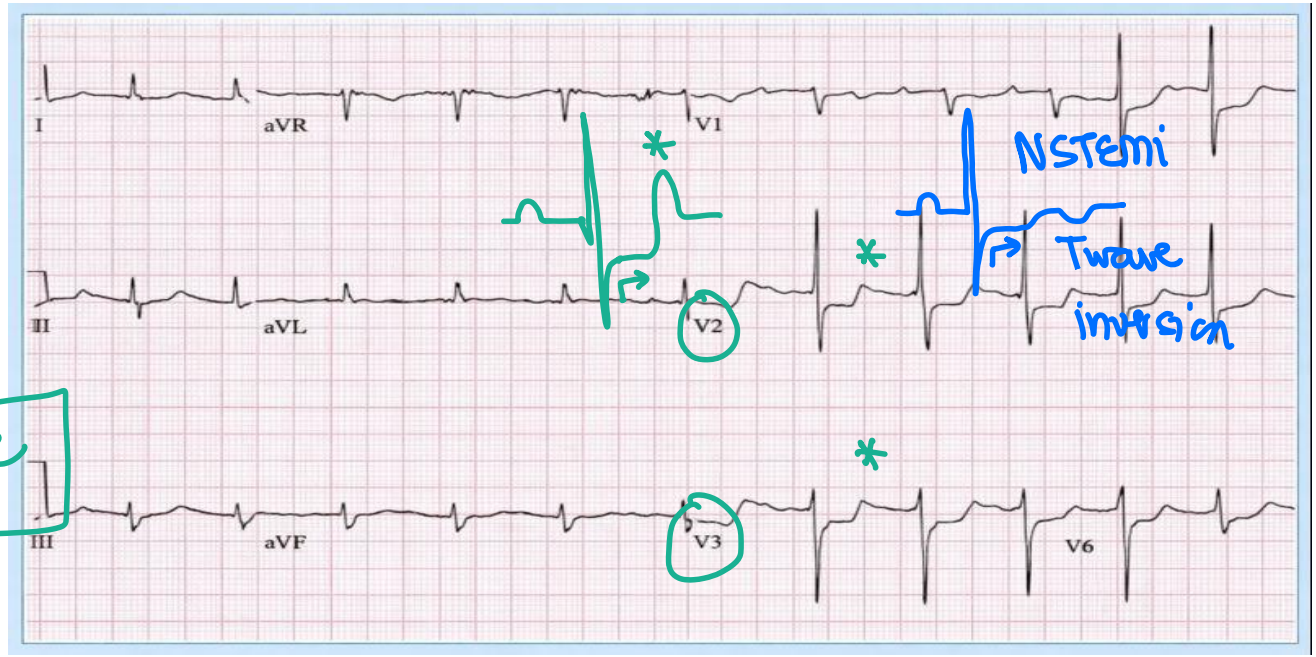
18. 60-year-old man presents with chest pain for 4 hours radiating to left shoulder and sweating. Pulse: 100/min, BP 140/100 mm Hg. ECG is shown below. Diagnosis is?

a. NSTEMI Anterior wall MI

b. Inferior wall MI

c. Posterior wall MI

d. Lateral wall MI



*

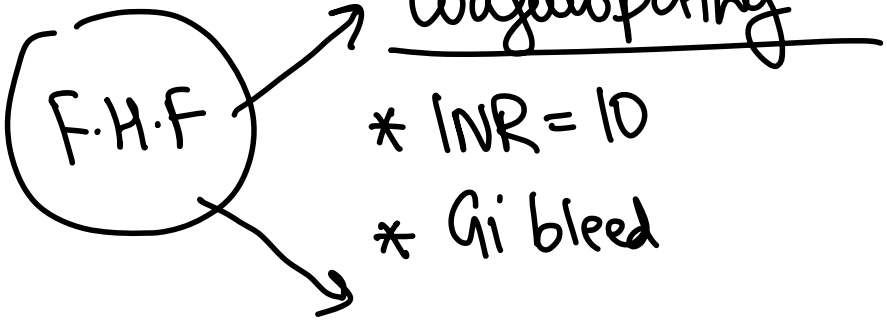
19. Alcoholic is brought unconscious to ER. His wife tells that he was passing black color stools for past 2 days. RBS is 55 mg/dl and INR is 10. What should be next step in management of this patient?

a. IV 25% dextrose + IV thiamine

b. IV thiamine + IV 25% dextrose

c. IV FFP and Lactulose via NG tube

d. IV FFP and Vitamin K1 5 mg IV



↓ carboxylation of factor 2|7|9|10

encephalopathy

ALTERED SENSORIUM.

GLOBAL confusion
Ophthalmoplegia
Ataxia

*

20. You are caring for an unconscious patient in the intensive care unit. The patient is exhibiting signs of respiratory distress, including increased respiratory rate, use of accessory muscles and a decrease in oxygen saturation. He recently had episode of GI bleed. Which is correct about next step in his management

a. Administering oxygen via nasal cannula at 2 liters per minute

b. Placing the patient in a high Fowler's position

c. Initiating non-invasive positive pressure ventilation (NIPPV)

d. Insert Wide bore needle in 5th intercostal space

NIV Ci

1. Unconscious pt
2. GI bleeding
3. BP ↓↓

pneumoT

HEMOTHORAX

21. Patient with chest trauma has 500 mL bloody drainage in collection chamber in the last 2 hours. Which is correct next best step in management of this patient

a. Arrange for instrument set for chest tube insertion

b. Observation of drain amount per hour

c. Initiate massive Blood transfusion

d. Inform Surgeon → THORACOTOMY: HEMOSTASIS

blood in drain
> 200 mL / hr x 2 HOURS

22. 8-year-old patient with a history of Type 1 diabetes mellitus presents to the emergency department vomiting and epigastric pain. RBS =300 mg/dl, urine dipstick is 4+ and ABG shows metabolic acidosis. Patient has thready pulse with circulatory failure. Which of the following is the most important priority nursing intervention in the initial management of this patient?

DKA
└ > 250 mg/dL: RBS

a. Initiate fluid replacement with saline bolus

b. Initiate fluid replacement with 1 liter of IV fluids and start IV regular insulin infusion.

c. Check for urine ketones and initiate potassium replacement before fluids.

d. Start oral insulin therapy once the patient becomes alert

Saline bolus 20 ml/kg → Saline 0.9% Nacl add KCl 40 meq/L → 1 Hr → insulin drip

23. 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?

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 echocardiogram

TB pericardial effusion

BP STABLE

LV ✓ RV

24. A 30-year-old woman presents with a history of shortness of breath and bilateral ankle oedema for past 3 months. Auscultation reveals a loud diastolic sound. Echo shows abnormal interventricular septal motion. Which of the following conditions is most likely responsible for these findings?

Rumbling low pitch diastolic murmur
└ mid-

a. Mitral stenosis

b. Constrictive pericarditis

Tumor plop sound

c. Left atrial myxoma

BP ↓↓

d. Pericardial tamponade

Hepatitis E | A

25. Multiple residents of same residential society present with jaundice and vomiting episodes for past 3 days after floods. On examination tender hepatomegaly is noted. Which of the following is first differential diagnosis

a. Viral hepatitis

b. Leptospirosis — FEVER + CONJ. SUFFUSSION + MYALGIA (calf)

c. Scrub typhus

d. Amoebic liver abscess — Jaundice ⊖

26. Which of the following is correct about RTA type 1?

a. Hypocalciuria

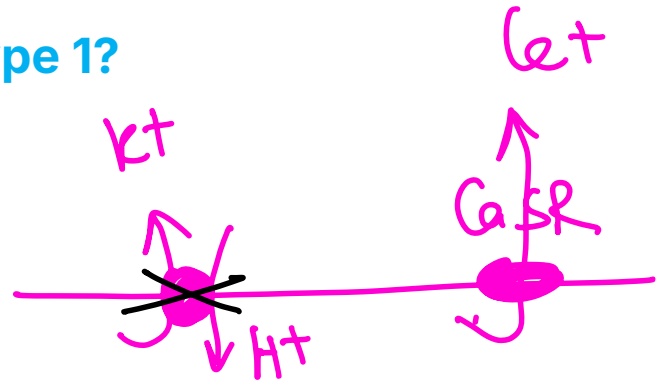
b. Metabolic acidosis with anion gap of > 12

c. Aminoaciduria

d. Urine pH of 9.4

NAGMA

RTA 2



KALIURIA
inability To acidify urine
HYPER CALCIURIA

27. 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 will be used in management of this patient?

THYROID STORM

a. Rectal propylthiouracil ✓

b. Esmolol ✓

c. S.S.K.I WOLF CHAIKOFF

d. Hydrocortisone ✓

1. a, b
2. a, c
3. a, b, c
4. a, b, c, d

PANCREAS

Carcinoid TUMOR: PNET

28. 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. 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

Parathyroid Adenoma

pheochr^M , parathyroid A
MCT * ch10 , ret

29. 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

b. Acetaminophen

c. Galcanezumab , ATOGEPANT

d. Oral sumatriptan

30. 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

Adrenal Adenome

ACTH dependent

- ectopic
- endogenous

(A) MRI HEAD

(B) CRH

(C) HD suppression Test

31. 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 SEIZURE

32. 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?

Duchenne's Muscular dystrophy

a. Muscle biopsy

b. Electromyography (EMG)

c. CK-MM levels

d. Gene sequencing

* WESTERN blot
* IF study
* Spl. stain

MCC death in DMD = HF > R. pneumonia

33. 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 if 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 : FAME

FAME

flaccid

Asc. sym paralysis

albumino-cytological

Monophasic : 12 Hrs

⇒ EDx : NCV

28 dy

34. 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?

DEMENTIA

21-24
10-20
<10

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

Amyloid- PET > f-MRI

PET- DOPA

MRI H = "Caudate atrophy"

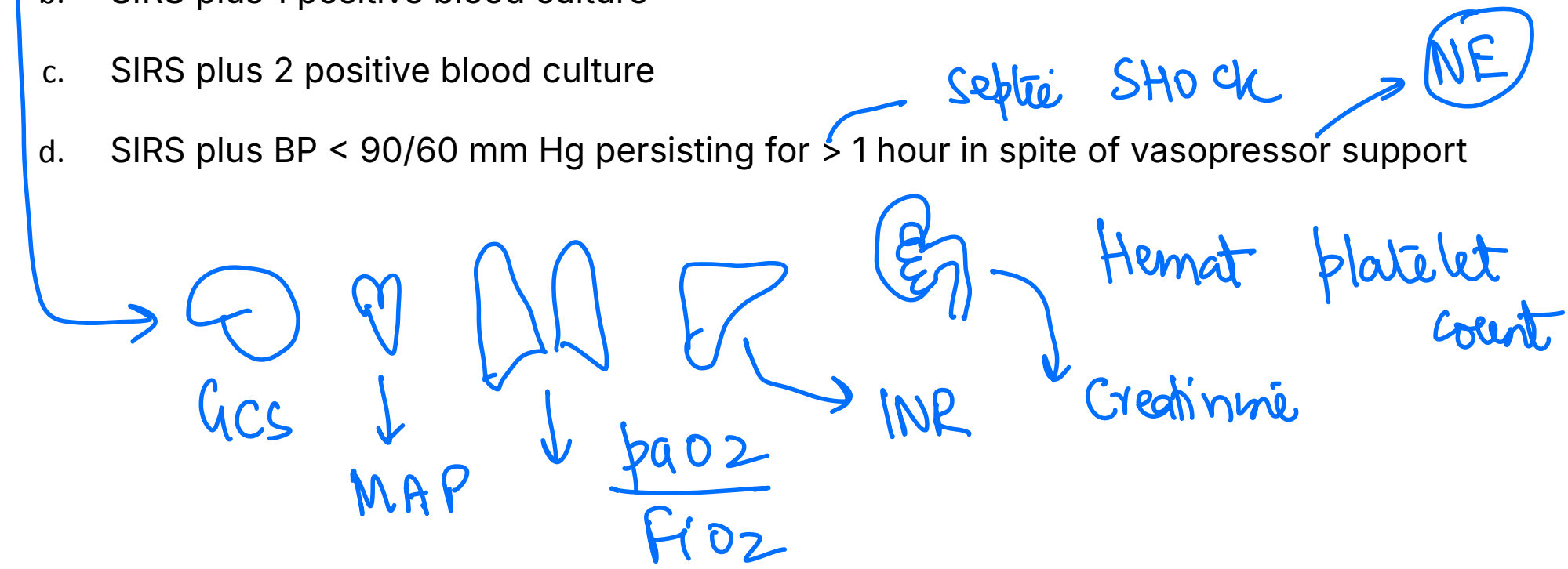
35. Which of the following is correct about diagnosis of sepsis

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



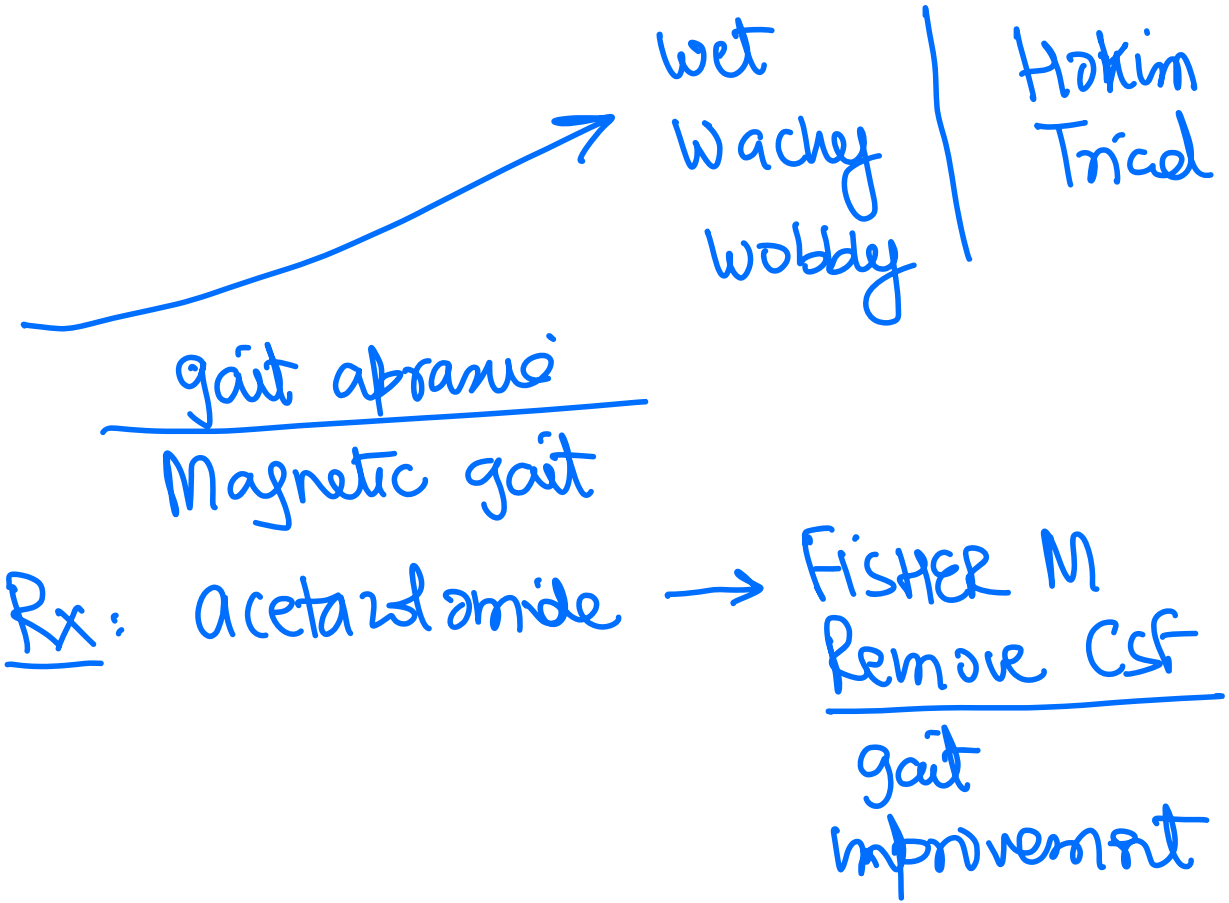
36. 72-year-old woman presented with difficulty walking, frequent falls, and urinary incontinence. Her cognitive evaluation shows impairments in executive function and memory. Her gait is characterized by a wide base and shuffling step. What is the most likely diagnosis?

a. Lewy Body Dementia

b. Frontotemporal dementia

c. Normal Pressure Hydrocephalus

d. Alzheimer's disease



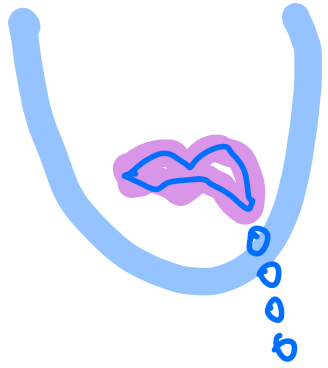
37. Which of the following statements about Bell's palsy is false?

a. Uprolling of eyeball on forcible closure of eye

b. Inability to open the affected eye

c. Corticosteroids are commonly used as part of the initial treatment

d. Dribbling of saliva from corners of mouth



38. 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. Which antibody will confirm the diagnosis?

a. Anti Mi-2

b. Anti Ro antibody

c. Anti Jo-1 antibody → associated c ILD in DM

d. Anti MDA5

DM

↳ Anti Mi-2, TIF, MDA 5, Jo-1

Jo-1 : Anti synthetase syn: Mechanic Hand *

39. 63-year-old woman presented to the emergency department with a severe, unilateral headache that has been present for the past two weeks. She describes the pain as sharp, shooting, and intense, localized around the right side of her face. Along with the headache, she has a recent history of scalp tenderness and occasional vision changes. Which of the following is used for treatment?

CH

a. High flow oxygen @15L /min

b. Rizatriptan — Migraine | CH

c. Prednisolone

d. Etoricoxib — Migraine

Ophthalmic A → Sup. Temporal A → * Skin of scalp

G.C.A

Headache

* Young ♂: Retroorbital pain, autonomic symptoms: CH
* " ♀ : POUND : migraine
* > 65 yr — ICSOL

GCA

40. 52-year-old man with a history of chronic liver disease presents to the clinic with confusion, lethargy, and involuntary flapping movements of his hands when his arms are extended. On examination, he is found to have asterixis. Which of the following is the most likely location of the lesion causing this symptom?

CHOREA, ATHEOTOSIS, H.B, Rigidity

a. Basal ganglia

gait ataxia, nystagmus

b. Cerebellum

c. Cerebral cortex ← NH_3 INTOXICATION

d. Caudate nucleus CHOREA

41. 60-year-old man presents with weakness and decreased sensation in his legs. Neurological examination reveals absent deep tendon reflexes in both lower extremities. Which of the following conditions is not typically associated with absent deep tendon reflexes?

a. Peripheral neuropathy — LMN

b. Guillain-Barré syndrome — LMN

c. Myasthenia Gravis

d. Spinal cord injury — LMN + UMN

42. 30-year-old male patient was brought to the casualty with a history of road traffic accident. On CT brain imaging, the following image was seen. What is the most probable diagnosis in this patient?

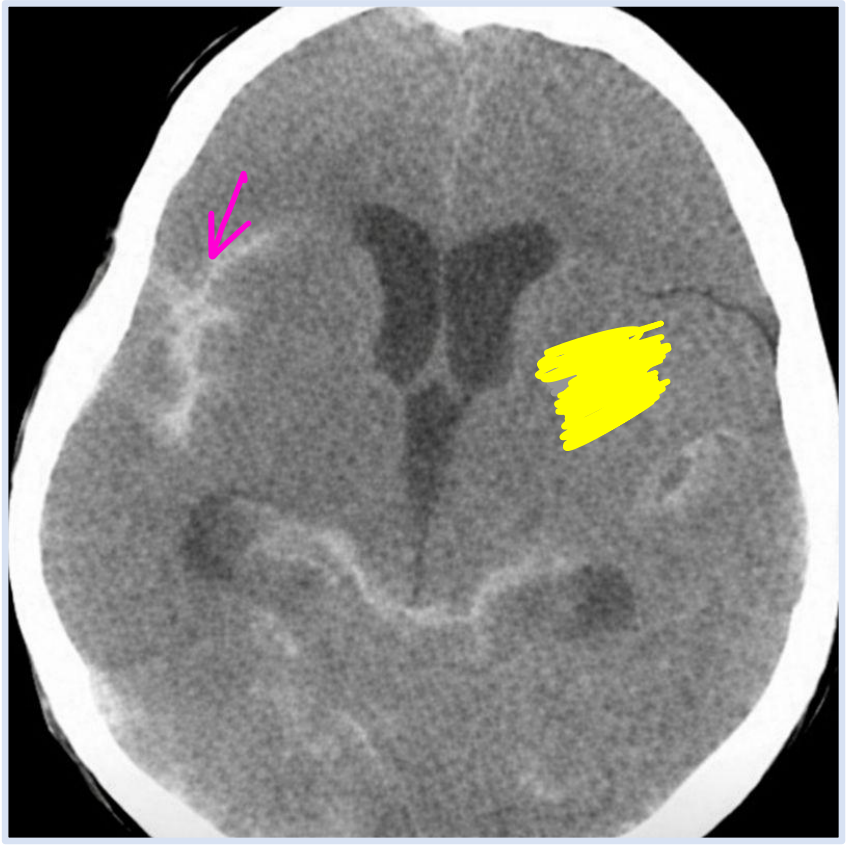
a. Intracerebral haemorrhage

b. Subdural haemorrhage

c. Subarachnoid haemorrhage

d. Diffuse axonal injury

blood in sylvian F



43. In a patient with a traumatic brain injury which of the following is the most ominous clinical finding and suggests impending brain herniation?

a. Widened pulse pressure

b. Bilateral extensor plantars

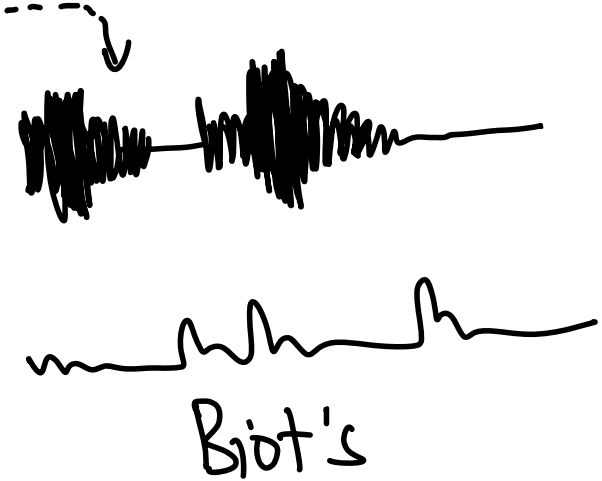
c. Cheyne-Stokes breathing

d. Unilateral dilated and sluggishly reactive pupil

R. CENTRE : Medulla

midbrain

L Hutchison pupil



44. A 55-year-old male presents with a headache that is worse in the morning, along with nausea and horizontal double vision that is more prominent when looking toward the right. On examination, he has bilateral papilledema. Which cranial nerve is most likely responsible for his double vision?

a. Cranial nerve III

b. Cranial nerve IV

c. Cranial nerve V

d. Cranial nerve VI

45. A 22-year-old man presents with daily headache for 3 weeks with new onset focal seizures. There is no fever or neck stiffness. MRI is shown below. What is the most likely diagnosis?

Temporal lobe

a. Viral encephalitis

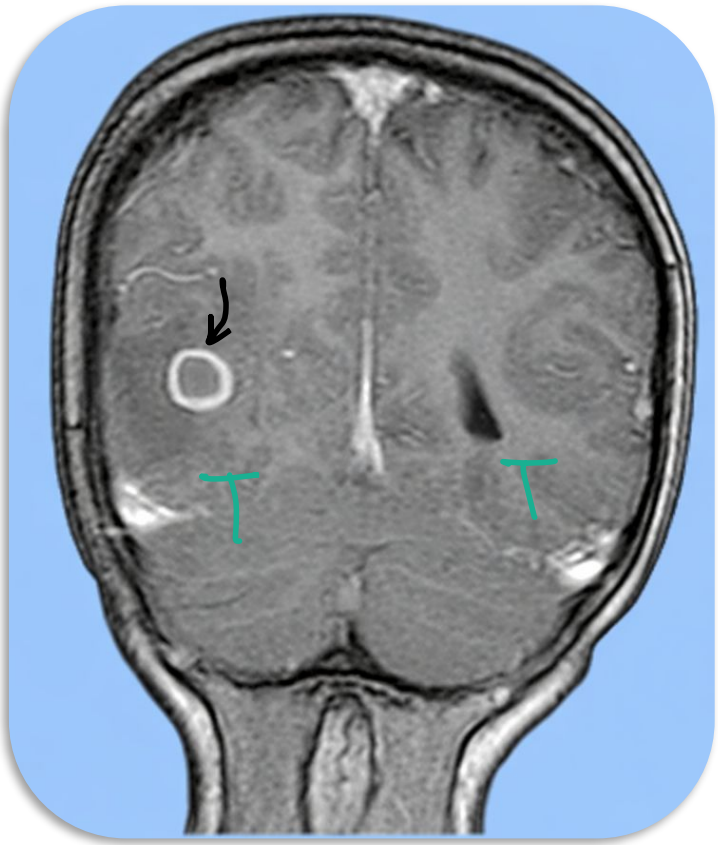
b. Neurocysticercosis

c. Tuberculoma

d. Glioma

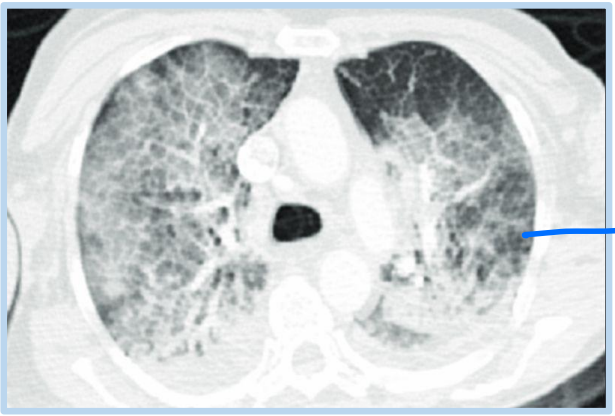
irregular margin

SCOLEX



Imaging feature	Neurocysticercosis	Tuberculoma
Number of lesions	Usually multiple	Often single (may be multiple)
Size	Small (5-20 mm)	Larger (>20 mm common)
Edema	Mild to moderate	Marked, disproportionate edema
Mass effect	Minimal	Prominent mass effect
T2 signal	Hyperintense	Hypointense (solid caseation)
Ring thickness	Thin, smooth	Thick, irregular
Enhancement	Thin ring	Thick ring/ nodular
MR spectroscopy	Lactate, succinate	Lipid peak

46. 68-year-old female patient is admitted to the intensive care unit with severe respiratory distress secondary to pneumonia. The medical team initiates management strategies to optimize oxygenation and minimize ventilator-induced lung injury. Which of the following management strategies is most appropriate for this patient?



ARDS

a. Use of high tidal volumes during mechanical ventilation

b. Administration of high-flow nasal cannula oxygen therapy

c. Implementation of a low tidal volume ventilation strategy

6ml/kg

d. Early use of corticosteroids

47. 68-year-old male with a history of purulent bronchorrhea that increases on change of posture. On examination clubbing is noted in both hands with bi-basiliar crepitations in both lung fields. Clinical diagnosis is?

a. Bronchiectasis

b. Chronic bronchitis X Clubbing

c. Lung Cancer CACHEXIA

d. IPF

L SOB

48. Match the following occupational lung diseases with their corresponding HRCT findings

1. Silicosis	a. Pleural plaque and bloody pleural effusion
2. Asbestosis	b. Crazy pavement pattern
3. Anthracosis	c. Centrilobular, perilymphatic nodules

GGO + interlobular septa FIBROSIS

a. 1-c, 2-a, 3-b

b. 1-a, 2-c, 3-b

c. 1-b, 2-a, 3-c

d. 1-b, 2-c, 3-a

49. Match the following heart murmurs with their corresponding conditions

1. Aortic stenosis	a. Systolic ejection murmur
2. Mitral stenosis	b. Diastolic rumble
3. Mitral regurgitation	c. Holosystolic murmur
4. Pulmonary regurgitation	d. Early diastolic murmur

a. 1-a, 2-b, 3-c, 4-d

b. 1-d, 2-c, 3-a, 4-b

c. 1-b, 2-c, 3-d, 4-a

d. 1-a, 2-b, 3-c, 3-d

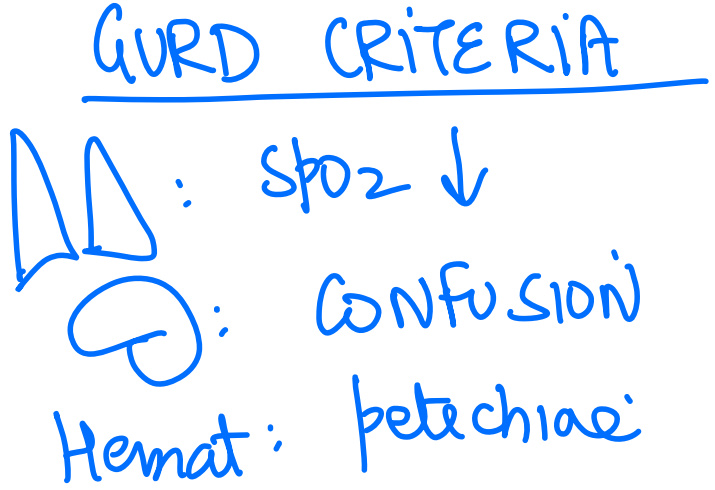
50. 25-year-old male presented to the emergency department 24 hours after a motor vehicle accident in which he sustained multiple long bone fractures. He now complains of shortness of breath, confusion, and petechial rash on his chest. His oxygen saturation is 88%, and arterial blood gas shows hypoxemia. What is the most likely diagnosis?

a. Pulmonary embolism

b. Fat embolism

c. Pneumothorax

d. Acute Respiratory Distress Syndrome



51. All of the following are features of heart failure except

a. Weight loss of > 4.5 Kg over 5 days

b. Bilateral pleural effusion

c. Bilateral fine crepitations

d. Swan Ganz catheter shows normal PCWP

52. 65-year-old man presents with progressive shortness of breath over the past year. On spirometry, his FEV_1/FVC ratio is 80%, and both FEV_1 and FVC are reduced. Post-bronchodilator testing shows no significant reversibility. Which of the following is the most likely diagnosis?

a. Bronchial asthma

b. Chronic obstructive pulmonary disease

c. Idiopathic pulmonary fibrosis

d. Bronchiectasis

53. 52-year-old diabetic man, recently recovered from COVID-19, presents with facial pain, nasal congestion, and blackish discharge from the nose. He also reports blurred vision in the right eye. On examination, there is right-sided facial swelling, ophthalmoplegia, and decreased visual acuity. MRI of the brain and sinuses shows invasive fungal sinusitis extending into the orbit and cavernous sinus. Which of the following is the most appropriate next step in management?

MUCORMYCOSIS

a. Start liposomal amphotericin B and monitor potassium and magnesium

b. Start liposomal amphotericin B and urgent surgical debridement

c. Start Micafungin and urgent surgical debridement

d. Start voriconazole and urgent surgical debridement

54. All are causes of SAAG value < 1.1 g/dl except:

a. Tuberculosis

b. Nephrotic syndrome

c. Budd chiari syndrome

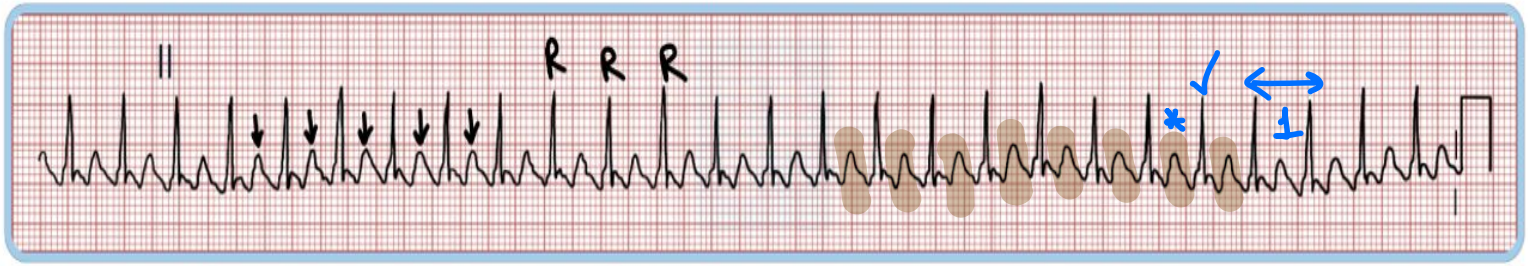
d. Peritoneal carcinomatosis

→ TB

→ Pc

SAAG: >1.1 → Nephrotic syndrome

55. A 50-year-old COPD patient presents with palpitations and SOB. BP on admission is 100/70 mm Hg and repeated after 5 minutes is 90/60 mm Hg. Which is correct about this Rhythm strip



ATRIAL flutter

V. Rate = 300/1

a. 2:1 conduction

b. Variable morphology of P waves → MAT

c. DC shock is not recommended X

d. Adenosine is first line drug PSVT

56. A 58-year-old male smoker, recently diagnosed with small-cell lung carcinoma, presents with cough and shortness of breath. On examination, he is alert and oriented (GCS 15/15), vitals are stable, and he appears euvolemic. Laboratory tests show: Serum sodium: 120 mEq/L, Serum osmolality: 255 mOsm/kg, Urine osmolality: 650 mOsm/kg. Which of the following is the most appropriate initial management for this patient?

a. 3% hypertonic saline bolus

b. 3% hypertonic saline infusion

c. Oral salt tablets with loop diuretics

d. Tolvaptan

SIADH: H_2O ++: Na ↓

Urine osm: ↑

* p·osm = ↓

Ch. Hyponatremie → asymptomatic → salt capsule + Furosemide

VAPTANS

seizures ⊕: 3% saline: Infusion pump 6meq/l ↑ for 24 HOUR

ics

Symp

3%. Saline

BOLUS

acute

chronic

INFUSION

Asymptomatic

1. Salt capsules
2. FUROSEMIDE
3. VAPTANS

57. Which of the following scenarios will not lead to nephrogenic diabetes insipidus?

a. Hypercalcemia — $Ca^{+} \rightarrow$ CD nephrocalcinosis

b. Toxoplasmosis → SIADH

c. Laxative abuse → $K\downarrow$: aquaporin Resistance: V_2

d. Sickle cell anaemia — CD: V_2 #: sickling CRISIS → NDI

↑Ca ↓K sickle cell A = NDI
lithium

58. 15-year-old boy presents with periorbital edema, cola color discoloration of urine and oliguria. BP on admission is 160/100 mm Hg with Pulse 120/min and pedal edema 4+. Urine shows protein 2+ with 100 RBC/HPF. Diagnosis is?

a. Post infectious glomerulonephritis

b. Berger disease

c. Minimal change disease

d. Rapidly progressive glomerulonephritis URAEMIA ++

59. A tall, thin 22-year-old male suddenly develops left-sided chest pain and breathlessness while playing basketball. Examination reveals pulse 100/min, BP 110/70 mm Hg , peripheral cyanosis with hyperresonance and decreased breath sounds on the left side of chest. Best initial management?

a. High-flow oxygen and observation

b. Needle decompression in 5th intercostal space midaxillary line

c. Chest tube insertion in 5th intercostal space midaxillary line

d. Thoracotomy with pleurodesis

60. A 20-year-old woman complains of proximal muscle weakness and elevated CK. Her ANA is positive. EMG shows myopathic changes. What is the likely diagnosis?

anti CCP

a. Rheumatoid arthritis with joint erosion and synovial hypertrophy

b. Polymyositis involving endomysial inflammation and muscle fibers

c. Fibromyalgia with widespread muscle pain and normal labs diagnosis of exclusion

d. Dermatomyositis with increased risk of malignancy

61. A 55-year-old man presents with uric acid crystals in joint fluid and severe pain in the big toe. Which of the following is the best acute management?

a. Start indomethacin and long-term allopurinol

b. Administer NSAIDs and colchicine for acute attack relief

c. Intra articular steroid

d. Oral steroids for one month

62. 62-year-old chronic smoker presents to the ER with nausea, vomiting, constipation, polyuria, and altered sensorium. On examination, he appears dehydrated. Labs show serum calcium of 14mg/dl. What is the first line treatment for this patient?

a. Normal saline + FUROSEMIDE

b. Calcitonin

c. Bisphosphonates

d. Oral phosphate

Sq. cell Ca lung

↑ PTH-rp

P.I.N.D

63. A 62-year-old man presents with chronic low backache for 4 months, worsening at night and not relieved by rest. He also complains of fatigue and recurrent infections. Labs show Hb 8.5 g/dL, serum calcium: 11.8 mg/dL, serum creatinine: 2.1 mg/dL, ESR: markedly elevated. Bone marrow study is shown below. Which of the following is correct about this condition?

CRAB

M. Myelome

a. Low Anion gap

b. Urinary protein electrophoresis shows increased albumin in urine

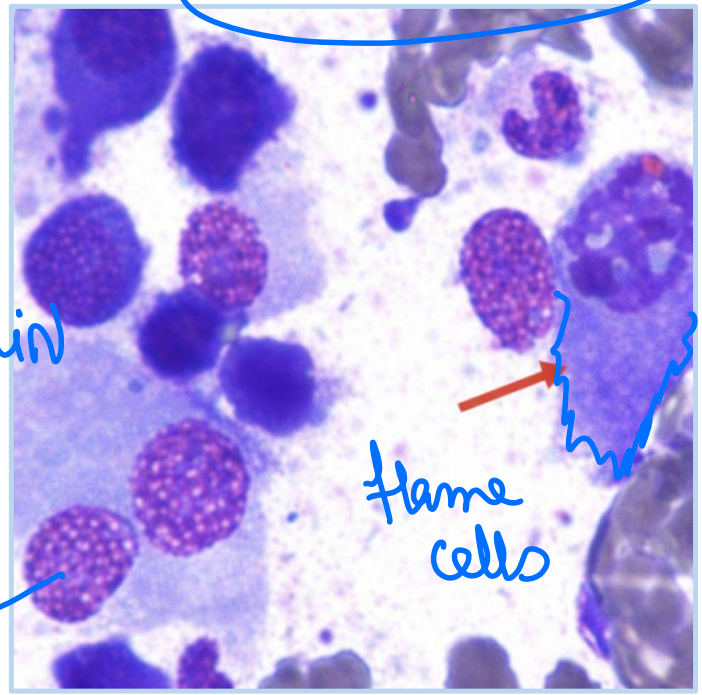
B. Jones +

c. Prognosis is determined by urinary A-beta 2 transferrin

β_2 MICROGLOBULIN

d. Leading cause of death is autonomic dysreflexia

INFECTION



AG
- n: DR FUSE
- ↑: KULT
- ↓: MM, Nephrotic

64. A 45-year-old diabetic with HbA1c of 10% is detected to have a low eGFR of 50 mL/min/1.73 m^2 on OPD visit. His Hb is 6 g/dL with normocytic normochromic anemia. Which of the following is the first-line approach for this patient?

a. Oral iron

b. Darbepoetin

c. Roxadustat

d. Blood transfusion

CKD: epo ↓

IRON ↓

UAG = 0 < (−) diarrhea, (+) RTA

The availability of recombinant human ESA has been one of the most significant advances in the care of renal patients since the introduction of dialysis and renal transplantation. Its routine use has obviated the need for regular blood transfusions in severely anemic CKD patients, thus dramatically reducing the incidence of transfusion-associated infections, iron overload, and the development of alloantibodies that can sensitize patients to donor kidney antigens and render kidney transplantation more problematic.

Adequate bone marrow iron stores should be available before treatment with ESA is initiated. Iron supplementation is usually essential to ensure an optimal response to ESA in patients with CKD because the demand for iron by the marrow frequently exceeds the amount of iron that is immediately available for erythropoiesis (measured by percent transferrin saturation), as well as the amount in iron stores (measured by serum ferritin). For the CKD patient not yet on dialysis or the patient treated with peritoneal dialysis, oral iron supplementation should be attempted. If there is GI intolerance or poor GI absorption, the patient may have to undergo IV iron infusion, keeping in mind that parenteral iron therapy can increase the susceptibility to bacterial infections and that the adverse effects of free serum iron are still under investigation. In addition to iron, an adequate supply of other major substrates and cofactors for red cell production must be ensured, including vitamin B_{12} and folate. Anemia resistant to recommended doses of ESA in the face of adequate iron stores may be due to some combination of the following: acute or chronic inflammation, inadequate dialysis, severe hyperparathyroidism, chronic blood loss or hemolysis, chronic infection, or malignancy.

A new class of agents to treat the anemia of CKD are the prolyl-

Harrison 22nd edition reference

65. A 9-year-old boy presents with fatigue, pallor, and recurrent episodes of fever over the past month. On examination, he has generalized lymphadenopathy and mild hepatosplenomegaly. Labs show Hb: 8 gm%, platelet count = 50,000/cu.mm, Total leukocyte count: 85,000/mm^3 and 80% lymphoblasts on peripheral smear. Which of the following is used in the pre-phase therapy of these patients?

*

a. Rasburicase plus IV fluids

b. Allopurinol plus IV fluids

c. Dexamethasone plus vincristine

d. IV fluids plus sodium bicarbonate for urinary alkalinization

ALL

Anemia + HSM + LN
TLC ↑

A > B: TLS

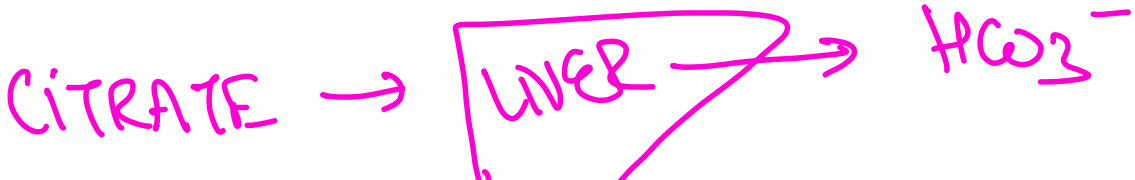
66. A 25-year-old female with a previous history of rheumatic fever presents with shortness of breath. On examination, there is a loud S1, an opening snap, and a mid-diastolic murmur that increases in intensity on inspiration. Which of the following is the most likely valvular heart disease?

a. Tricuspid stenosis

b. Mitral regurgitation

c. Mitral stenosis

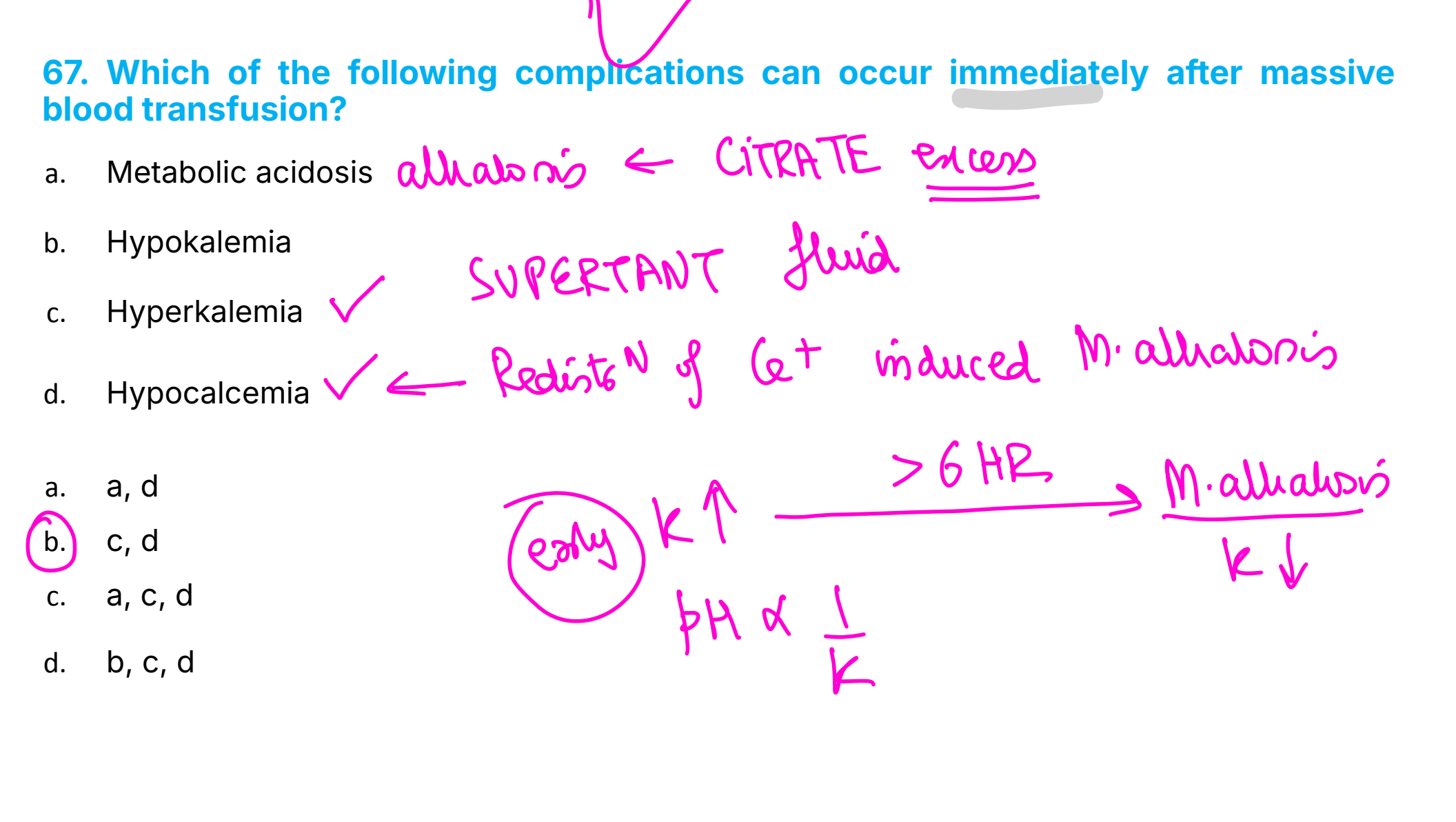
d. Aortic regurgitation



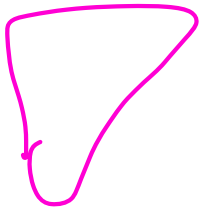
67. Which of the following complications can occur immediately after massive blood transfusion?

a. Metabolic acidosis
b. Hypokalemia
c. Hyperkalemia ✓
d. Hypocalcemia ✓

a. a, d
b. c, d
c. a, c, d
d. b, c, d



CITRATE ++



HCO3 ++

1. M. ALKALOSIS
2. ↓ Ca++
3. > 6 HR Hypokalemia

pH ↑ ↓ K

Supernatant fluid

K ↑

68. 6-month child is noted to have polyuria and failure to thrive. On assessment child is found to have severe hearing loss. Vitals Pulse: 80/min, BP 60/40 mm Hg with signs of dehydration. Work up shows metabolic alkalosis with hypokalaemia. Diagnosis is

a. Bartter syndrome — Cl^- channel: INNER EAR

b. Gitelman syndrome

c. Conn syndrome — BP ↑

d. Dent disease → ↑ Ca+ in urine

myoglobinuria

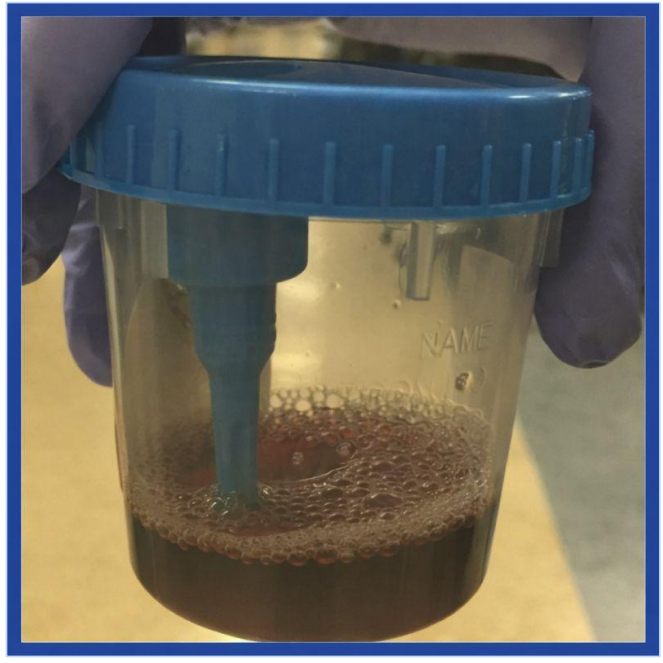
69. In a patient with electric burns and stable vital signs, red-colored urine is observed. What is the most likely finding in the patient's work up?

a. RBCs in urine

b. Increased creatine kinase levels

c. Increased unconjugated bilirubin levels

d. Increased serum calcium



70. A 40-year-old alcoholic presents with hematemesis and hemodynamic instability. He had previous tested UBT positive but had not taken treatment. On examination severe epigastric tenderness is noted. There is no pedal edema. Which of the following should be done in this patient after volume resuscitation.

a. CT abdomen to look for gas under diagram

b. Endoscopy

c. Octreotide

d. Octreotide and blakemore tube insertion

? PUD

→ O. varices bleed

* pedal edema * caput medusae

* splenomegaly * ↓↓

albumin ↓

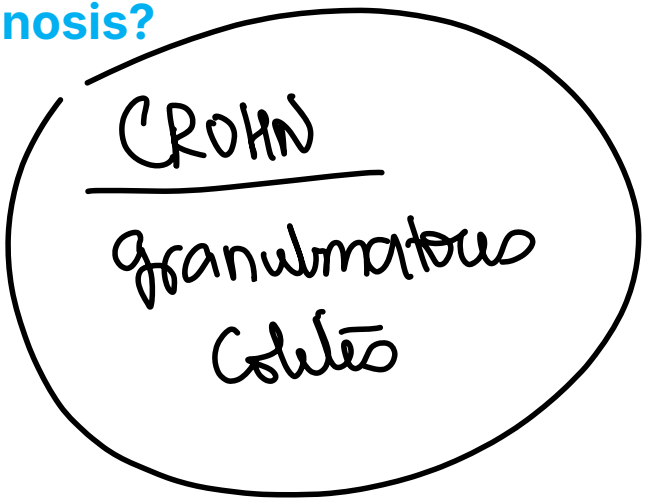
71. A 25-year-old male has diarrhea, abdominal cramps, weight loss, and non-caseating granulomas in the colon. What is the diagnosis?

a. Ulcerative colitis with pancolitis and pseudopolyps

b. Irritable bowel syndrome with no histological change

c. Crohn's disease involving any GI segment with granulomas

d. Amoebic colitis with flask-shaped ulcers



72. A 20-year-old girl presents with breathing difficulty at rest. On examination, enlarged cervical lymph nodes are palpated with rubbery consistency. Chest X-ray shows bilateral hilar lymphadenopathy. Biopsy reveals large cells with abundant cytoplasm and bilobed nuclei. Which of the following is correct about this condition?

a. Stellate inclusions in cytoplasm

b. Langhans type of giant cells

c. Aberration in chromosome 9

d. CD15 and CD30 negative

H/O STRO

73. CHADS2-Vasc score is used for assessment of which of the following

a. Need for oral anticoagulation

b. Predict the chances of occurrence of stroke ABCD$_2$ SCORE

c. Diagnosis of stroke

d. Diagnosis of Transient ischemic attack

74. Best treatment for Pneumonia patient admitted with CRB score of 2

a. IV ampicillin -sulbactam with azithromycin

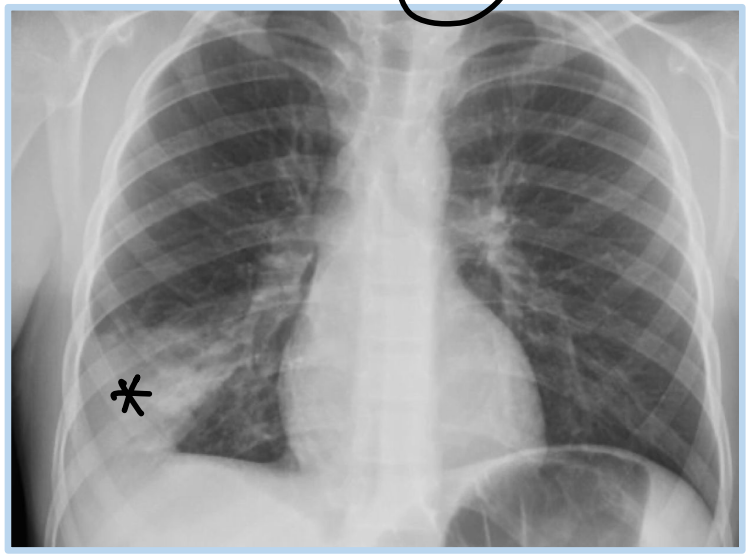
b. IV Vancomycin

c. IV piperacillin with tazobactam

d. IV amoxicillin + IV azithromycin

HAP

VAP



RL2

75. 50-year-old female with arm weakness and unilateral ptosis that shows diurnal variation of symptoms that improve with activity. DTR are absent. Electrodiagnostic studies are awaited. First differential diagnosis is?

a. M. Gravis

b. LEMS

anti P/Q Ab

c. AIDP

d. CIDP

THANK YOU