

MEDICINE -2 T&D JUNE 2020

Paper Discussion

DR. DEEPAK MARWAH

Pansystolic
murmur

1. Which produces a mid-diastolic murmur?

Systolic : ejection
murmur

a. Tricuspid-regurgitation

b. Tricuspid -stenosis

c. Atrial myxoma

~~d. Aortic regurgitation~~

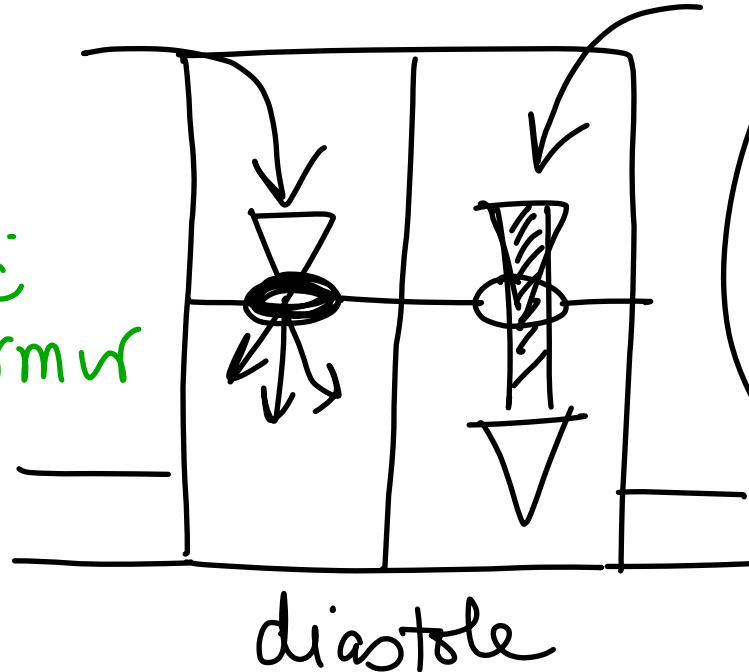
filling → M T

↓ Early diastolic
murmur

late diastolic murmur

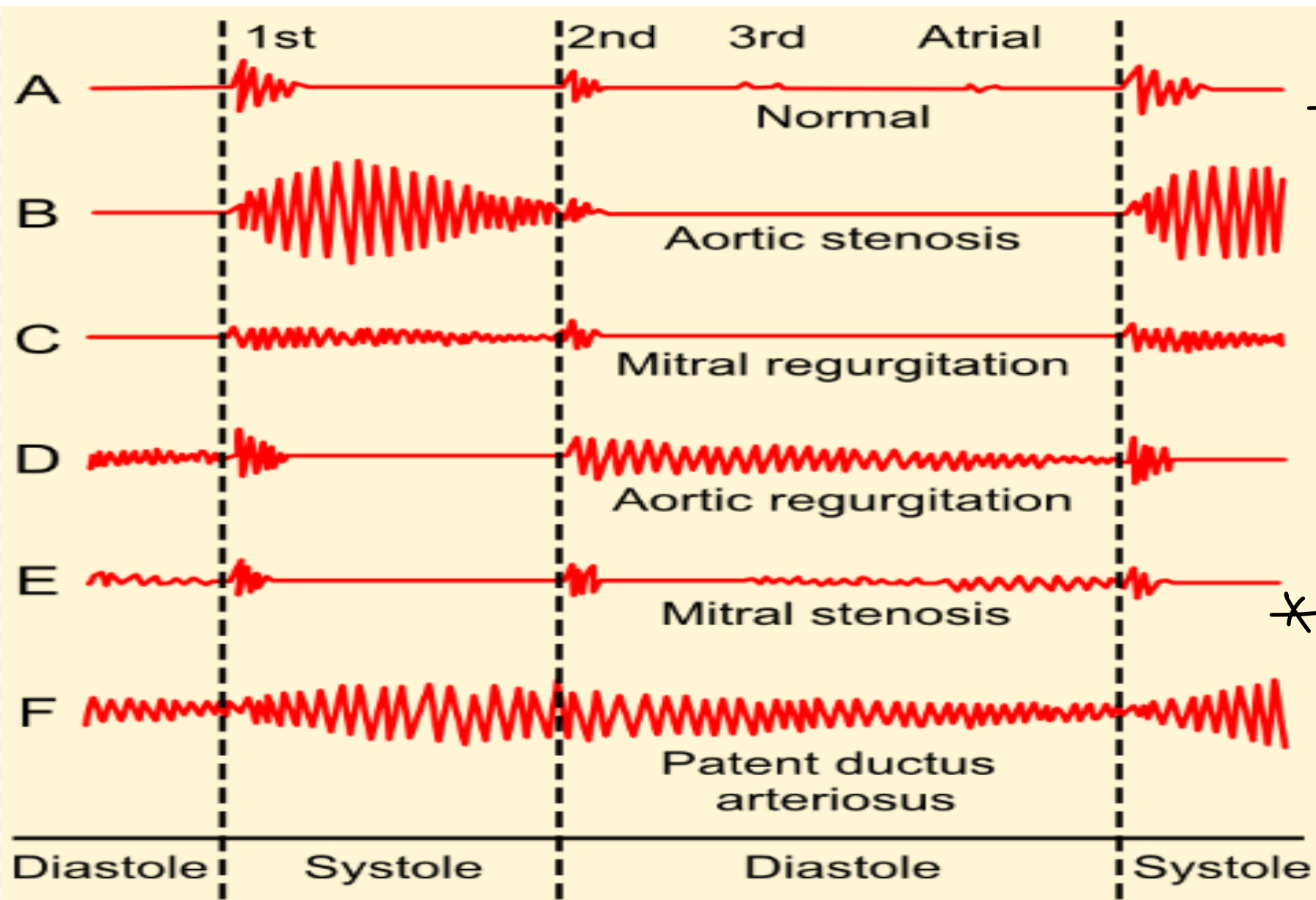
damage to mitral valve #

↳ MR: PSM



MDM

- * MS
- * Austin Flint
- * flow murmur



* Austin flint murmur



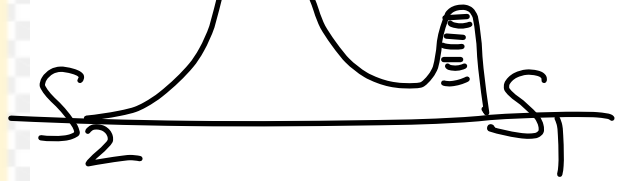
SEVERE AR

M.D.M

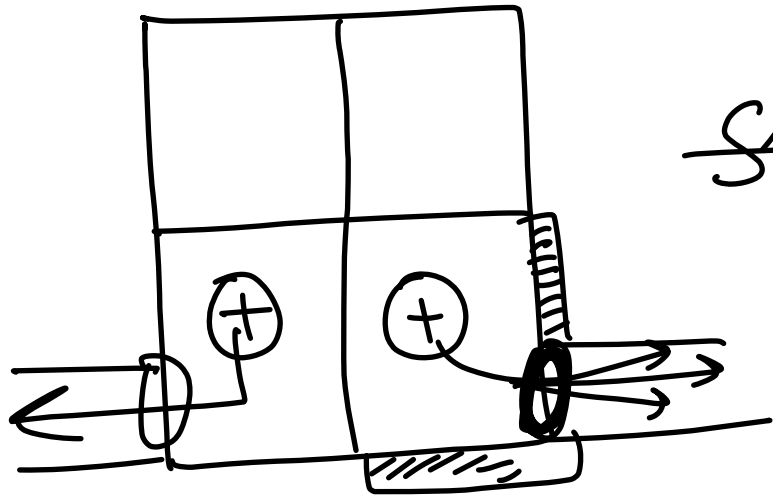
TS

MS: MDM \bar{c}

presystolic accentuation



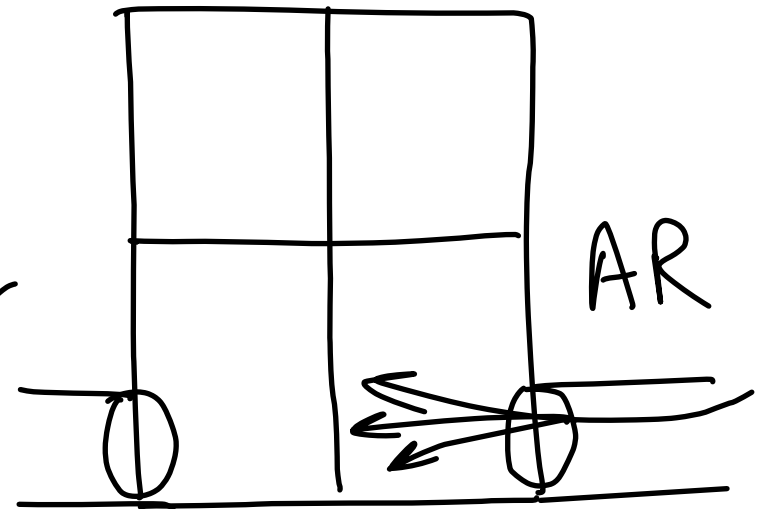
PASS Pulmonic Aortic stenosis : systolic murmur
 PAID " " Insufficiency : diastolic "



AS



Ejection systolic murmur
 Crescendo - decrescendo



defective A2

MDM

aortic flint Murmur

2. A 30-year lady was stabbed in the arm by her ex-husband and has received multiple Blood transfusions in your emergency department. She is now complaining of respiratory distress and examination shows HR= 120/min, BP= 140/100 mm Hg with fine crepitations in bilateral lung fields. Liver is palpable 3 cm below costal margins. ^{bleeding}
Diagnosis is?

HR ↑ BP ↑ pulm edema + palpable

TACO: volume overload

a. Transfusion associated circulatory overload

b. Transfusion associated acute lung injury

c. ~~Mismatched~~ blood transfusion Histamine BP ↓

d. ~~Allergic reaction~~ to blood components BP ↓
Histamine

Non cardiogenic
⊕ pulm edema
BP ⊕
liver size ⊕

R.D ⊕ Post BT

RASH, FEVER

1. mismatched BT \Rightarrow BP \downarrow cyanosis +
laryngeal edema

2. TRALI

BLACK urine

* BP \uparrow , liver span \uparrow
junc crepts +

4. Fever
(anxiety)

3. TACO

* BP \uparrow , liver span \uparrow
junc crepts +, B.N.P \uparrow

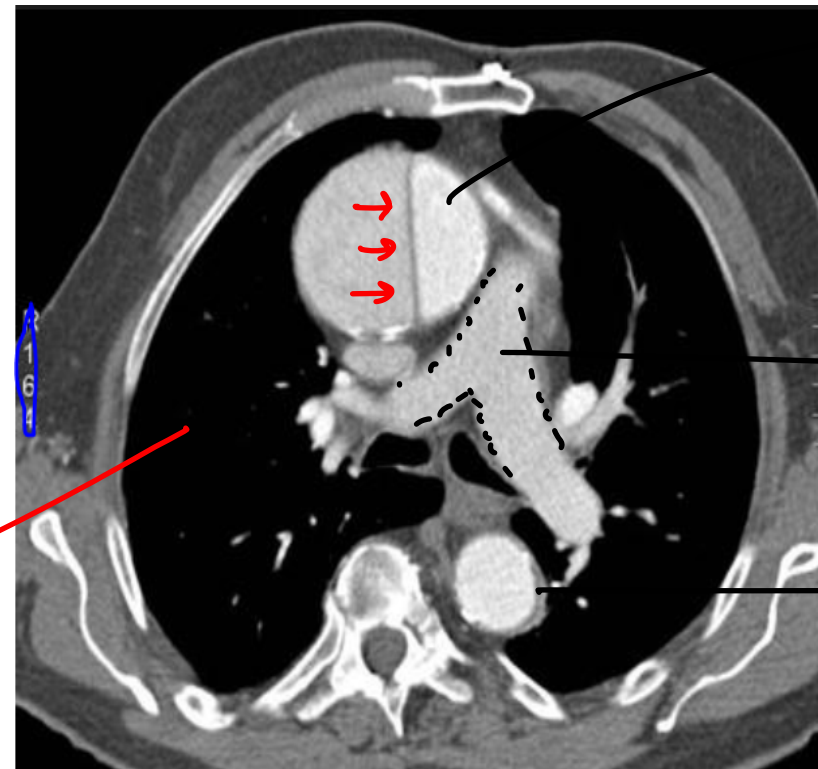
"Tennis ball sign"

3. Comment on the diagnosis of the CT chest shown?

- a. Massive pulmonary embolism
- b. Submassive Pulmonary embolism
- ☒ c. Aortic dissection
- d. Left atrial Myxoma

Type A aortic dissection

Type B aortic dissection
lungs

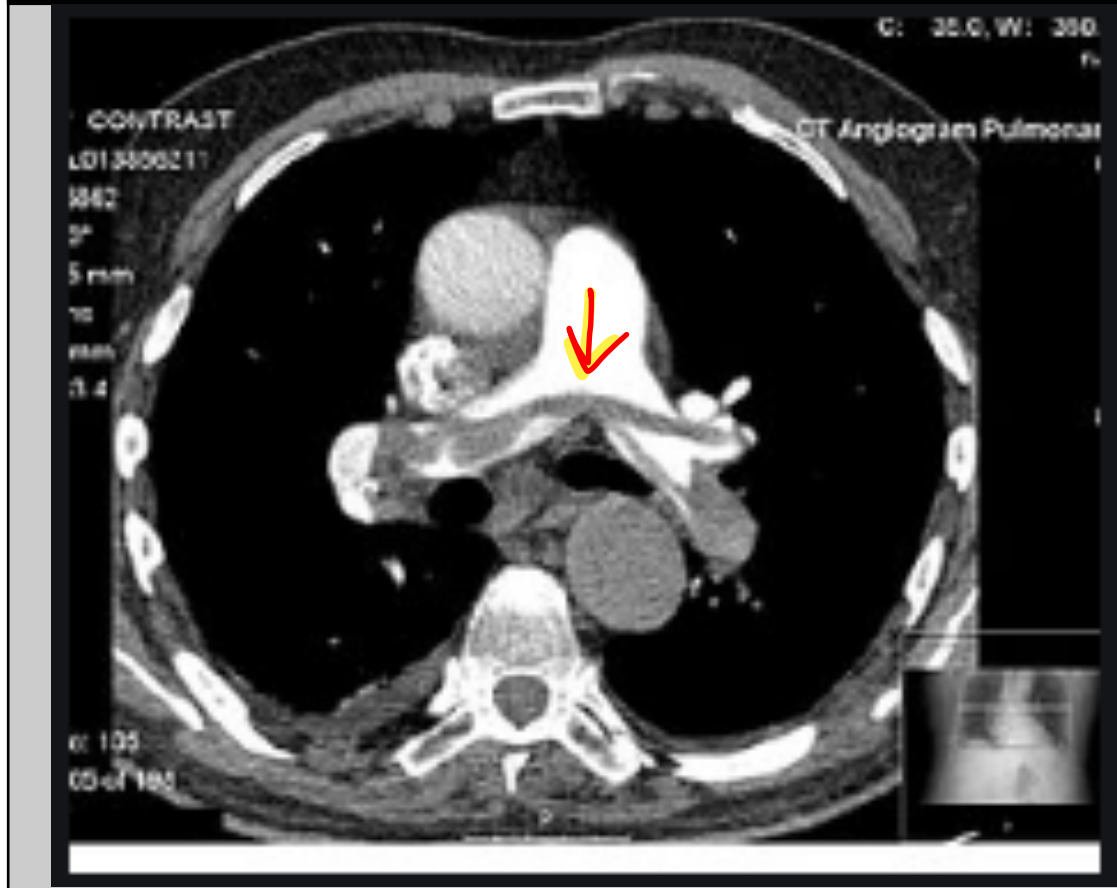


C.T.A chest

ALTEPLASE



Pulmonary embolism *
MASSIVE



CTA: chest

Sx Repair

Aortic dissection *
Type A

Type B aortic
dissection



embolism
labeta



pulm embolism \Rightarrow Heparin

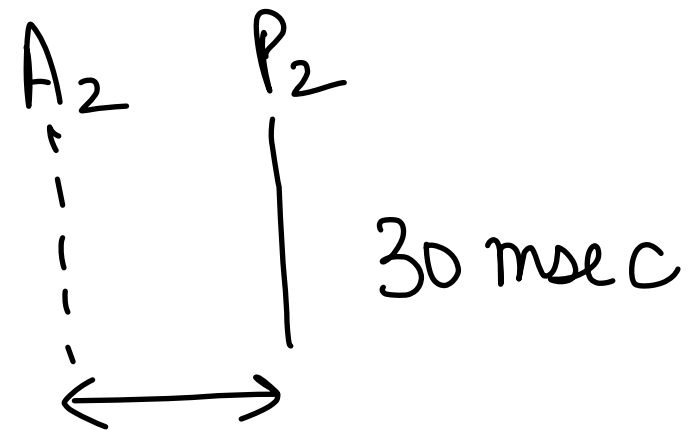
4. Which of the following auscultation findings are abnormal?

a. Loud S1 in pregnancy : hyperdynamic state : Normal

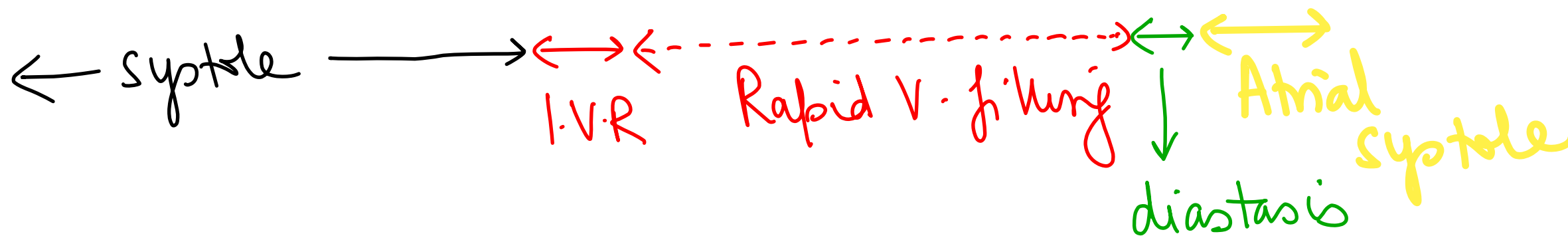
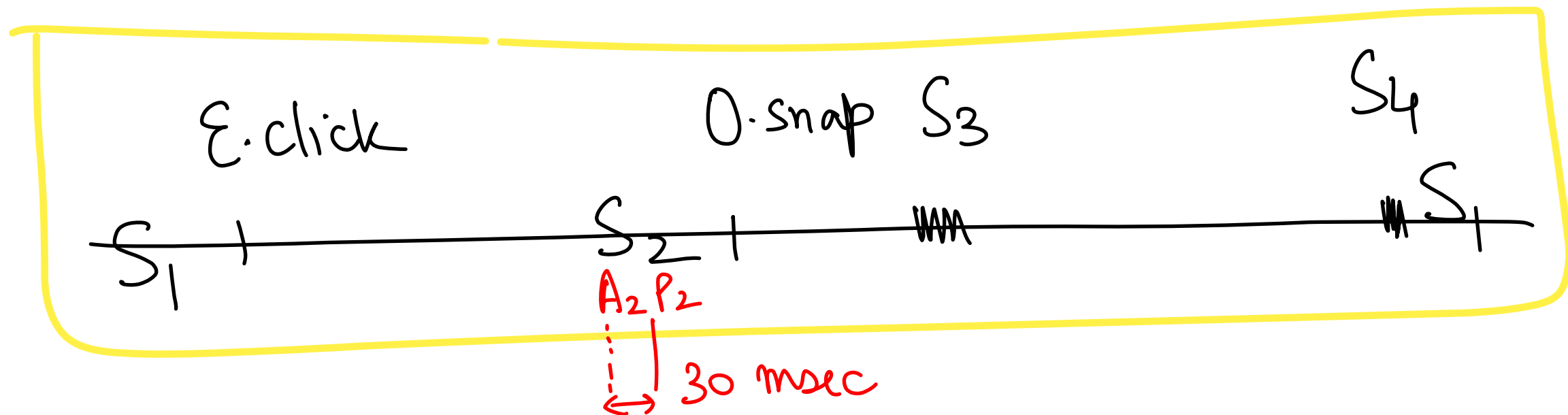
b. S3 in young adults : Normal

c. S4 : HTN

d. Splitting of S2 on deep inspiration : A_2 P_2
physiological splitting S₂ 30 msec



Loud S₁ : physio : children + pregnancy
S₃ " : young adult



A-FIB, AFWUTTER, VT, PSVT + BP ↓ = DC SHOCK

definitive

CARDIOVERSION

5. What is correct treatment of Ventricular fibrillation? Synchronise

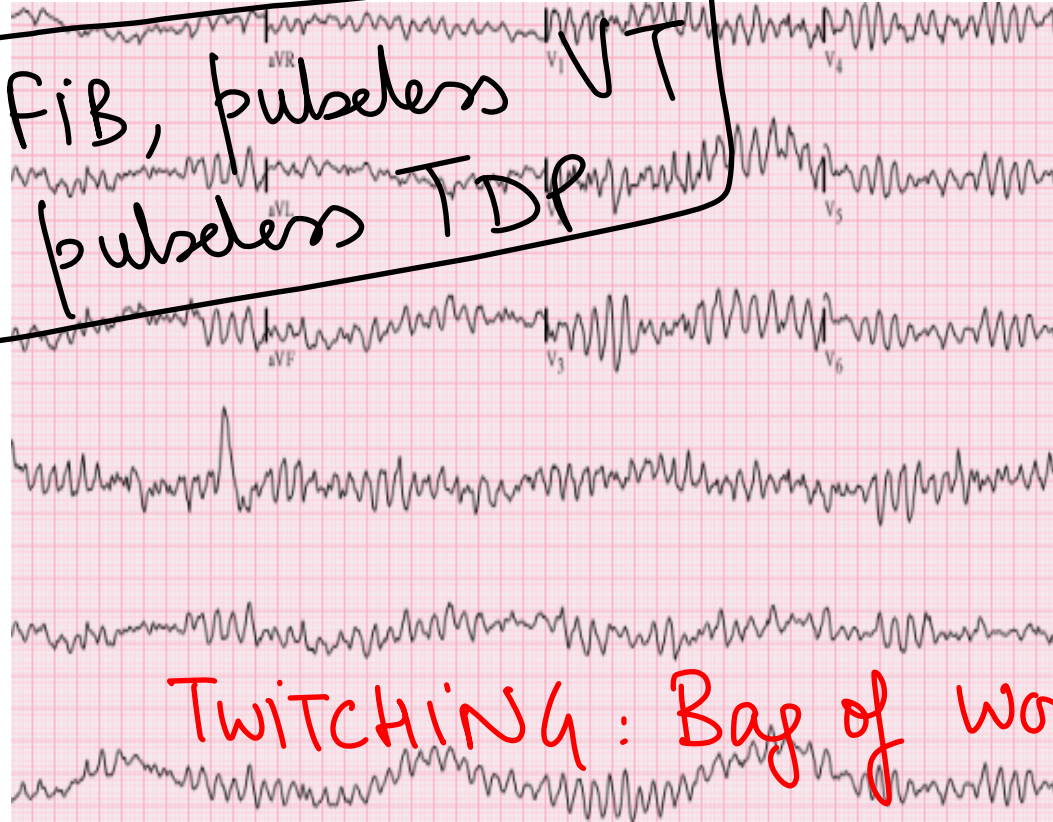
a. Cardioversion

b. Defibrillation →

c. Precordial thump

d. Chest compressions

V-FIB, pulseless VT
pulseless TDP



Peak of
R wave

DC SHOCK
delivery at
Peak of R wave

TWITCHING: Bag of worms

A. FIB

A. FLUTTER

PSVT

WPW

VT pulseless

TDP

V. FIB

Esmolol > VERAPAMIL diltiazem

"

"

Adenosine

Procainamide

amiodarone

Mg SO₄

—

*

→ Defibrillation, non syn. DC Shock

Total Body water \uparrow
Total body salt

dilutional hyponatremia

6. Euvolemic Hyponatremia is seen in?

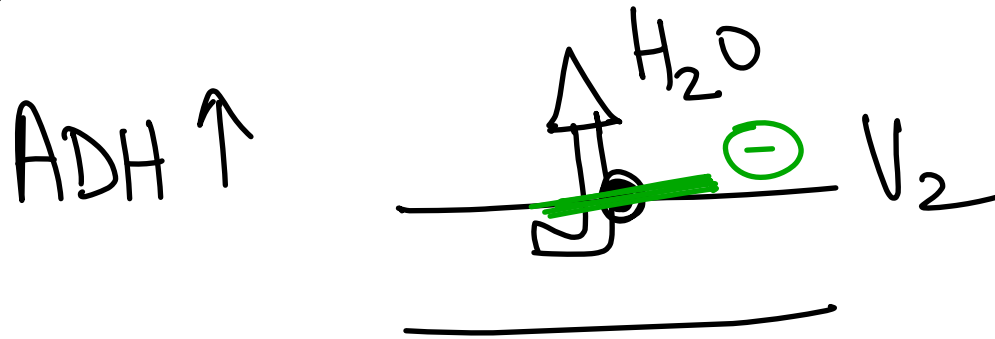
a. Diarrhea \rightarrow TBW \downarrow

b. Heart failure \rightarrow aldosterone \uparrow : TBW \uparrow TBS \uparrow

c. Ascites \rightarrow

HYPERVolemic
Hyponatremia

d. Syndrome of inappropriate ADH production



Cause :
lithium

DOC SIADH \Rightarrow VAPTANS TOLVAPTAN

CDI \Rightarrow desmopressin NDI Rx : Thiazides

HYPONATREMIA

TBW ↓

TBS ↓

HYPOVLEMIC

HYPONATREMIA

* diarrhea

* Cerebral salt
wasting syndrome

TBW ↑

TBS ⊕

EUVLEMIC

HYPONATREMIA

* SIADH

✓ Carcinoid Tumor

✓ Oat cell Ca lung

✓ meningitis / encephalitis

TBW ↑↑

TBS ↑

HYPERVLEMIC

HYPONATREMIA

Ascites

CHF

Cirrhosis

Portal

myocard

HTN

Flapping Tremors

7. A patient of ascites is undergoing Large volume paracentesis. After procedure he has developed asterixis and then become very drowsy. What is reason?

dehydration + : $\text{NH}_3 \uparrow$ CONCENTRATION

a. Hepatorenal syndrome: **creatinine** \uparrow

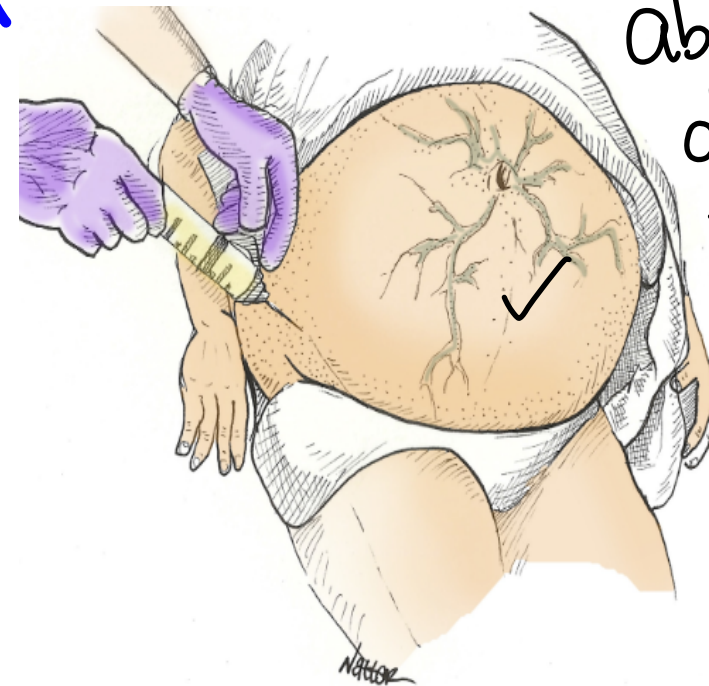
b. Hepatic encephalopathy

~~c.~~ Hemoperitoneum due to faulty procedure

~~d.~~ Hepatopulmonary syndrome

\rightarrow R. distress

Shock!



abdo.
distense
Tense
ascites

MASSIVE ASCITES



TENSE ASCITES: R.D ++

Salt free albumin

↑ oncotic pressure

mobilization of fluid

dehydration ↓

⊖ Large volume paracentesis

S/E: dehydration +

NH₃ ↑ CONC

ASTERIXIS

⊖

→ back into intravascular compartment

Rx DC: Massive ascites = salt free albumin + Large volume paracentesis

8. Which of the following is not correct about Defibrillation?

a. Easy for untrained person ✓

b. Decrease in success rate ✓ with delay in initiation

c. Improves prognosis ✓

d. 1-minute gap between 2 shocks

A.E.D automated external

defib

Sternal depression

1 cm

2 cm

5 cm

neonate: 2 rescuers : 3:1

one cycle of CPR: 30:2 x 2 minutes

child

single Rescuer: 30:2

Two Rescuer: 15:2

adult

single / Two // : 30:2

9. Drug of choice for management of central diabetes insipidus

ADH ↓

a. Thiazides

b. Vaptans

c. Demeclocycline

d. Desmopressin nasal spray

CDI : water deprivation test
NDI

SIADH : water loading Test
VAPTANS

IOC: Cushing syn: Low dose dexamethasone supp test

CORTISOL \uparrow

10. Cushing syndrome is seen due to?

- a. Bronchial carcinoid **excess synthesis of ACTH +**
- b. ~~Simmond's disease~~ : Non obstetric cause of pituitary: CORTISOL \downarrow
- c. ~~Pituitary infarction~~ ACTH \downarrow CORTISOL \downarrow #

d. Pituitary adenoma

ACTH \uparrow

CORTISOL \uparrow

\Rightarrow Cushing disease / endogenous source ACTH

MC for Cushing syn: Iatrogenic Steroids: exogenous use
* Oat cell Ca lung: ectopic ACTH production
Carcinoid Tumor

PDE 4 \ominus

11. Roflumilast is used in management of?

- a. COPD
- b. Asthma
- c. Chronic bronchitis
- d. Bronchiectasis

PDE 3 \ominus : CILOSTAZOL
AMRINONE / MILRINONE
PDE 4 \ominus : ROFLUMILAST
PDE 5 \ominus : TADALAFIL / SILDENAFIL

BURGER
CHF
COPD
E.D, HAPF

✓ Tetany : $S. \text{ Calcium} < 7 \text{ mg\%}$

12. Chvostek sign is?

Rx \Rightarrow IV Calcium gluconate 10%.

a. Twitching of circumoral muscles on tapping of facial nerve

b. Obstetrician's hand

c. Inability to open eye on tapping of facial nerve

d. Carpo-pedal spasm

death in Tetany : laryngospasm

↓
✓ TROSSEAU SIGN
OBSTETRICIAN
HAND

Tap on
ant
Border of
parotid gland



facial NERVE

13. Procedure of choice for control of massive hemoptysis?

- a. Balloon catheter tamponade
- b. Rigid bronchoscopy and Photocoagulation
- c. Bronchial artery embolization
- d. Flexible bronchoscopy and cautery

TB

Bronchial Artery

electro -

* Hematemesis : PUD : UGIE + CAUTERY Base of ulcer
* Hemoptysis : TB : Bronchial artery embolization

→ dyspnea ↑: sitting position

14. Platypnea is seen with?

a. Atrial myxoma, Hepatopulmonary syndrome

b. Hepato-renal syndrome

c. Renal artery stenosis

d. Kyphoscoliosis

* Orthopnea: dyspnea ↑ supine: acute CHF

* Trepopnea: dyspnea ↑: lat decubitus: U/L massive pl. effusion

15. Median rhomboid glossitis is seen in?

a. Candidiasis | oral Thrush

b. AIDS

c. Chronic kidney disease

d. Mouth breathers



loss of
papillae
on
dorsum.

16. Most common cause of non-traumatic acute chest pain?

a. Tuberculosis

b. GIT causes : GERD : digene gel, PANTOP

c. Ischemic heart disease

d. Costochondritis

Resolution

doesn't

occurs : few minutes

consider :
doing

ECG

↓

rule out MI
ACS

17. A 45-year-old smoker patient presents with sudden onset unrelenting chest pain with loss of peripheral pulses. Lung fields are clear and has normal air entry. First differential diagnosis is?

~~a~~ Mirizzi's syndrome →

b Acute aortic syndrome  Aortic dissection

~~c~~ Viral pericarditis : chest pain , pulses normal

~~d~~ Spontaneous pneumothorax

↳ absent air entry

MC 62 Aortic dissection : HTN > MARFAN syn

HARTMANN syndrome : Biliary colic
RUQ pain



18. Number of blood cultures to be performed in F.U.O?

a. N= 1

b. N= 2

☒ c. N= 3

d. N= 4

> 38.3° C

> 3 weeks

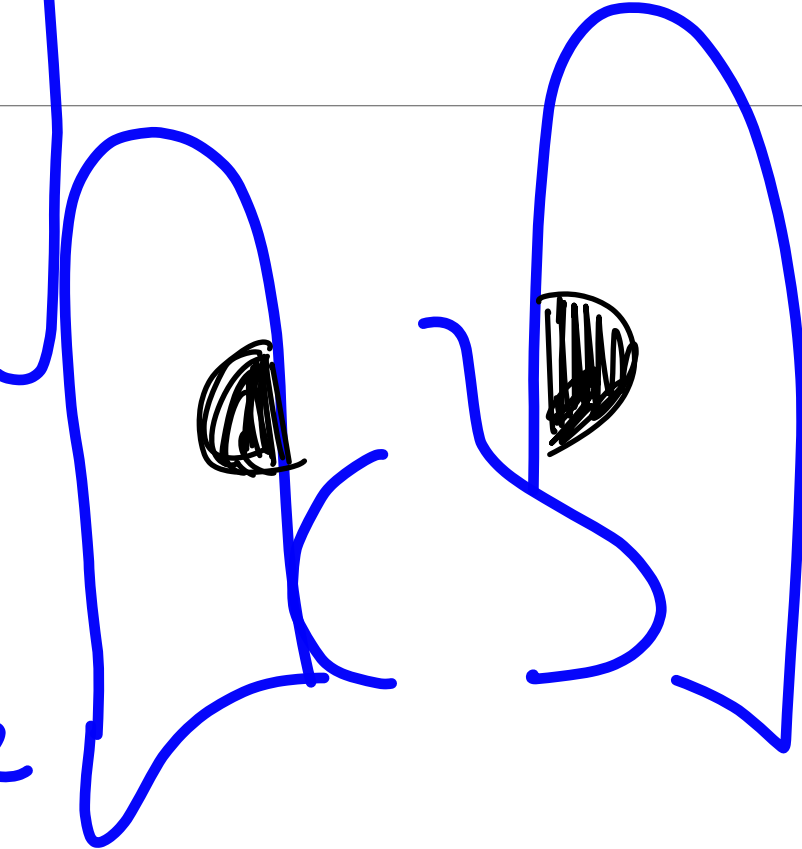
Blood culture → 1st wk: Typhoid
→ Infective endocarditis
→ F.U.O

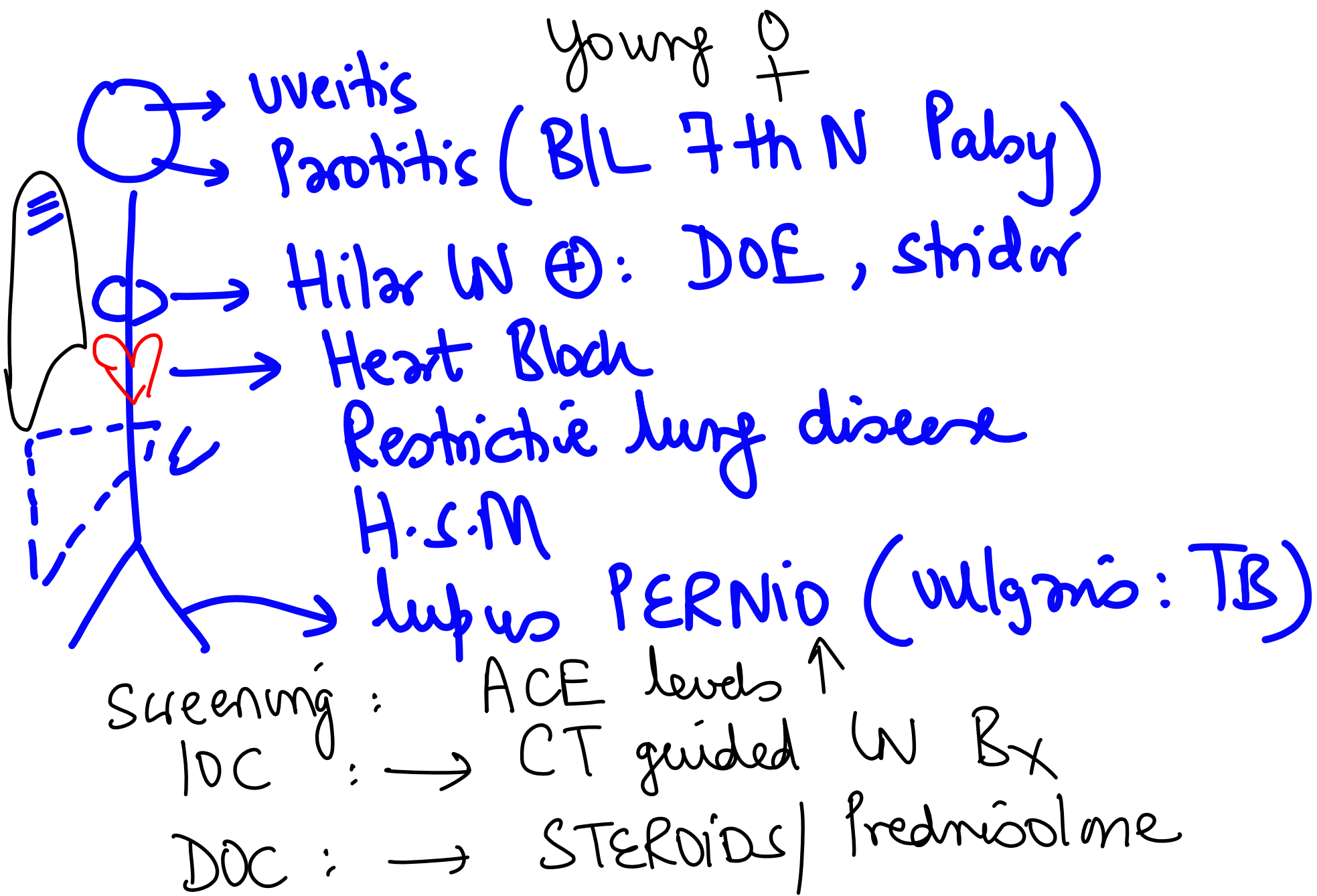
19. CXR showing massive hilar lymphadenopathy is a feature of ?

- a. Idiopathic pulmonary fibrosis
- b. Non-specific interstitial pneumonitis
- c. Sarcoidosis : BIL Hilar W++ ,
- d. Cryptogenic organising pneumonia

Non Caseating granulomas ⊕

I.L.D: interstitial lung disease
pulm. FIBROSIS

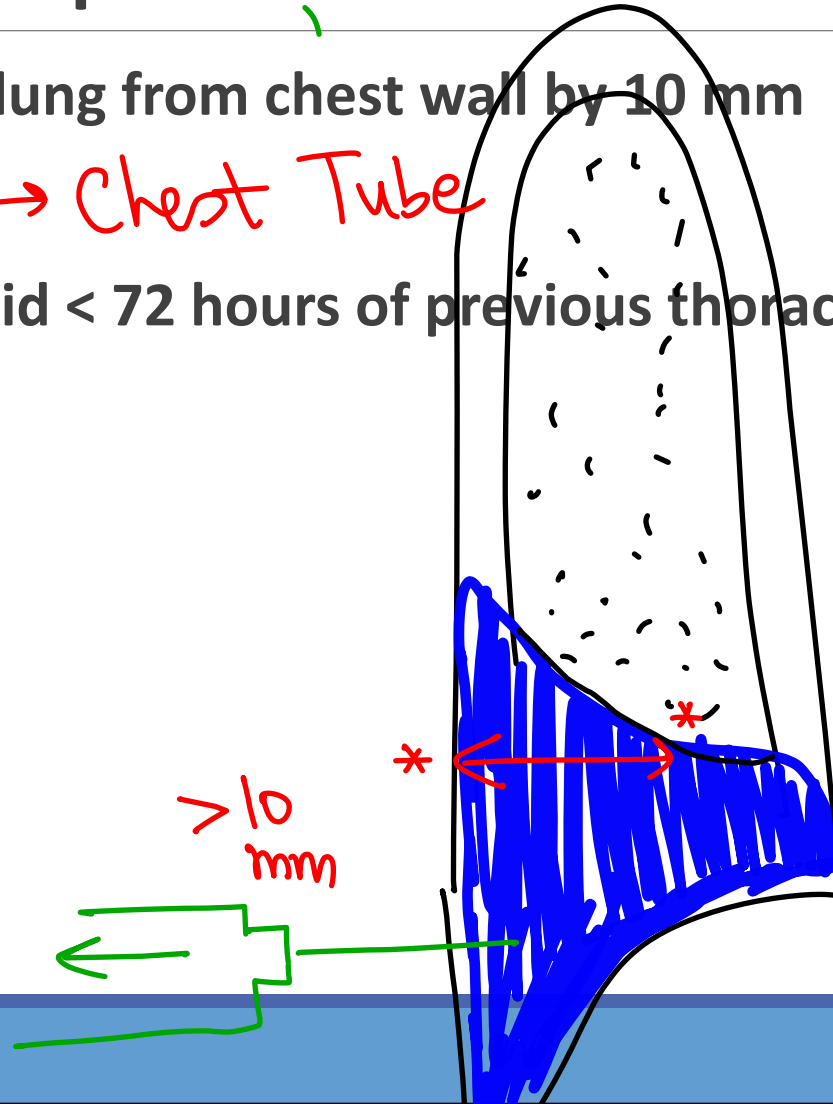




20. Indication for therapeutic thoracentesis is?

- a. Free fluid separates the lung from chest wall by 10 mm
- b. Loculated pleural fluid → Chest Tube
- c. Recurrence of pleural fluid < 72 hours of previous thoracentesis : Workup why?
- d. Mesothelioma

Thoracentesis
Pleural Tap



Pleural effusion

21. Salt and pepper chromatin and high nuclear cytoplasmic ratio is a feature of?

ANAPLASIA

- a. Oat cell cancer
- b. Malignant melanoma
- c. Neuroepithelial tumour
- d. Mesothelioma

Oat cell Ca lung

- * most aggressive
- * MICROMETS → Brain, heart
- * SVC syndrome
- * Cushing syn, SIADH
- * HPE: Salt / Pepper chromatin
- Small cell c high NC Rat

22. Treatment of type 4 respiratory failure?

→ Respi^o muscle fatigue

- a. Elective intubation and mechanical ventilation
- b. Non-invasive positive pressure ventilation
- c. Rebreathing mask with FiO_2 of 80%
- d. Hyperbaric oxygen therapy

↓
N.I.V

COPD exacerbation

- ↓
- 1. CO poisoning
- 2. High altitude pulm edema

Types of Respi failure

anxiety
acute asthma
high altitude

I : $\downarrow pO_2$ $pCO_2 \textcircled{n} / \downarrow$: HYPERVENTILATION

II : $\downarrow pO_2$ $pCO_2 \uparrow$: HYPOVENTILATION

* Status asthmaticus

* OSA

III : Post op atelectasis

* diaphragm paralysis: GBS

IV : Resp. muscle fatigue due to shock

O₂ delivery

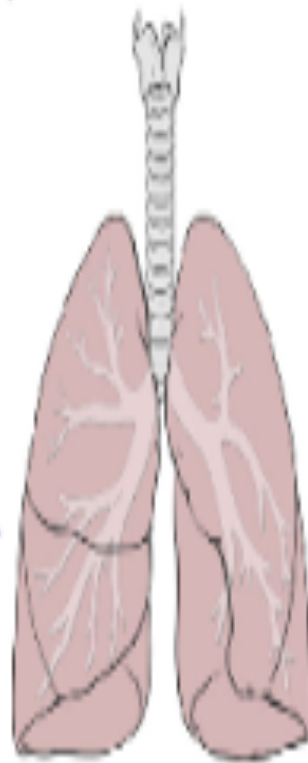
1. face mask / nasal cannula
2. Rebreathing Mask : 80%.
3. N.I.V
4. Hyperbaric O₂ Therapy
5. Assist control mechanical ventilation

23. Proliferative phase of ARDS lasts for?

- a. 0-3 days
- b. 3-7 days
- ☒ c. 7-21 days
- d. 21-30 days

Representative Initiating events

- sepsis
- pneumonia
- trauma/shock
- aspiration
- blood transfusion



Diffuse Alveolar
Damage (DAD)

Acute phase

Exudative phase 4-7 days

- interstitial & alveolar edema
- neutrophil influx
- enhance cytokine production
- loss of coagulation & fibrinolytic homeostasis

Late phase

Proliferative phase >7-21 days

- alveolar & intimal fibrosis
- proliferation of type II cells & fibroblasts

Fibrotic phase >21 days *

- extensive pulmonary fibrosis ✓
- loss of normal alveolar architecture *
- emphysematous lungs

Shock lung
ARDS

E	4-7	
P	7-21	d
F	>21	

24. Leading direct cause of ARDS is?

a. Pneumonia

b. Sepsis

c. Mendelson syndrome

d. TRALI

direct: Pneumonia

indirect: Sepsis

* HPE: EPF

Shock lung / ARDS: * pO_2 / FiO_2 Ratio < 300
Berlin criteria
mild < 300
mod < 200
severe < 100

* Non-cardiogenic pulm edema

* Causes: Mendelson syndrome / TRALI

* Rx: Low volume ventilation / Prone position

Pneumothorax (Tension) \Rightarrow Wide bore needle 21cs

25. Comment on the diagnosis?

a. Eventration of diaphragm

b. Hampton hump : pulm embolism

c. Pneumomediastinum

~~d. Water bottle heart~~ : Pericardial effusion : CT RATIO $\uparrow\uparrow$

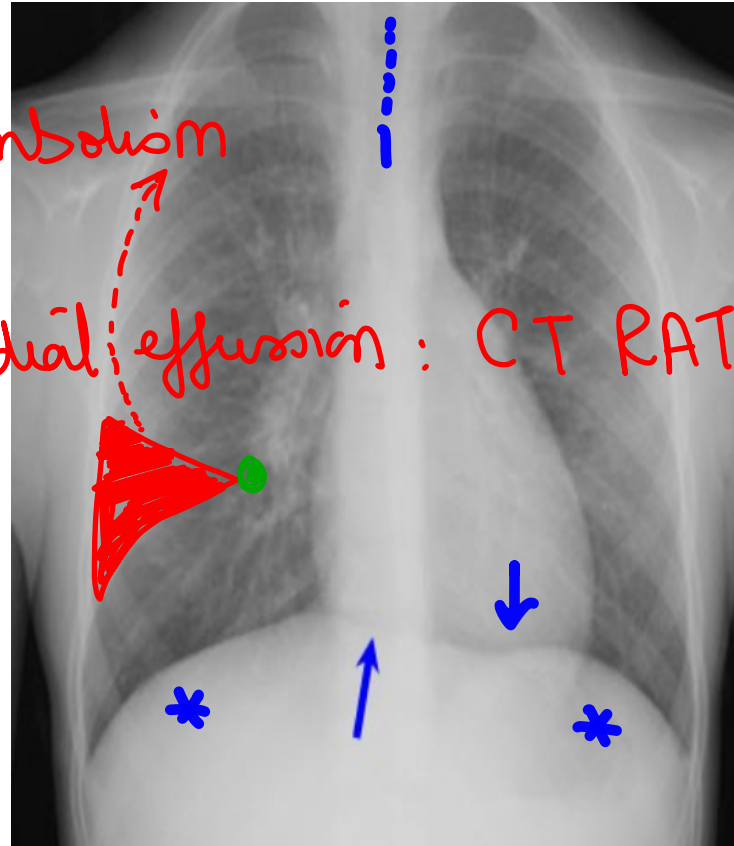
Continuous diaphragm

Sign +

Boerrhove syn \oplus

gun shot injury \oplus

Rx : High flow O_2



Chest Tube 51cs, MAL

- ✓ ^{G.U.D} Pneumoperitoneum : P.V.D : Bowel sounds ↓
- ✓ Pneumo Thxal : Traume > Emphyeme
deep sulcus sign absent air entry / absent B-sound
- ✓ Pneumo mediastinum : Boerhaave syn
↓
Continuous diaphragm sign : Hamman crunch sign +

Strep. pneumoniae : C.A.P / lobar pneumonia

26. Comment on the first differential diagnosis of the CXR of a 50-year-old patient with cough for 2 weeks.*

Round pneumonia

RvZ opacity

air fluid level

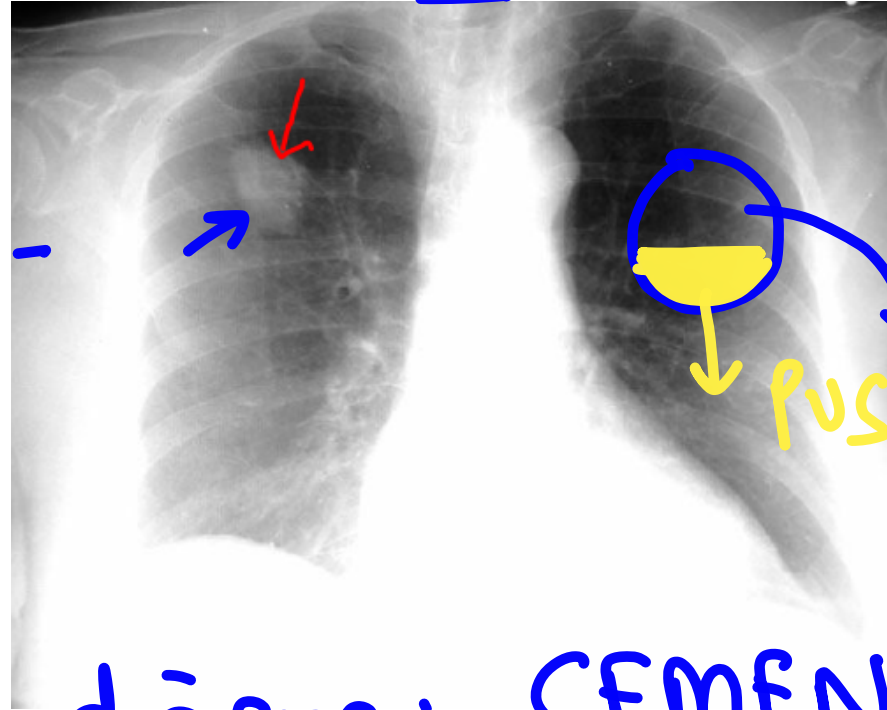
a. Round pneumonia +/-

~~b. Lung abscess~~

~~c. Asbestosis coin lesion~~

d. Pulmonary hamartoma

(benign)



Occupational lung disease: CEMENT PLANT WORKER

27. Diabetes mellitus leads to

- a. Type A lactic acidosis → SHOCK: CS, septic, neurogenic
 - ☒ b. Type B lactic acidosis → DM / CRF / METFORMIN / PHENFORMIN
 - c. Type D lactic acidosis → GI SURGERY
 - d. All of the above
- * SHORT Bowel syndrome $\frac{2m \text{ left}}{6m \text{ behind}}$
enteric bacteria
producing D-lactate

28. Which of the following is used for management of Pneumomediastinum? **BOERRHAAVE | gun shots**

- ☒ a. Breathing of high concentration of oxygen will lead to absorption of mediastinal air
- b. Breathing of low concentration of oxygen will lead to absorption of mediastinal air
- ~~c. ICD tube in 2nd ICS~~
- d. ICD tube in 5th ICS

→ **Pneumothorax**
Empyema
Hemopneumothorax

29. Which of the following has no role in management of acute onset hyperkalemia?

- a. Intravenous bicarbonate
- b. Nebulization with albuterol
- c. Calcium chloride
- d. Intravenous regular insulin

NEVER calcium
carbonate

$K^+ > 8.0 \text{ meq}$

diastolic ARREST

Seen in CKD/AKI

DOC ↓

1. IV 10% Cal gluconate/chloride
2. Insulin drip : 0.5-1 meq ↓
hr
3. Salbutamol neb
4. Furosemide = KALIURIA
5. Hemodialysis

Na ↓ < 125 : seizures

Rx
: 3% saline

Na ↑ : > 160 : "

: 5% saline

K ↓ : < 1.0 : diaph. paralysis : KCL

K ↑ : > 8.0 : diastolic arrest : Cal. gluconate *

meq/L > 13 : systolic arrest

Rx = bisphosphonates

Calcium = 9-11 mg%

→ < 7 : laryngospasm *

Rx: Cal. gluconate

R. Rate $\uparrow \Rightarrow$ HYPERVENTILATION: CO_2 washout

30. Pregnancy leads to development of?

a. Respiratory alkalosis

b. Respiratory acidosis : $\text{CO}_2 \uparrow$ accumulation : Status asthmaticus
OSA
diaph. paralysis

c. Metabolic acidosis

d. Metabolic alkalosis

EROSIVE Arthritis Rheumatoid Arthritis

31. A female reports symmetrical small joint polyarthritis for 2 weeks. Labs show rheumatoid factor levels at 1:320 (positive is 1:40) and anti-CCP at 58 units (40 to 59 units are considered strongly positive). What is the appropriate next step in the management of this patient?

DMARDS

- a. Naproxen 500 mg twice a day and follow up in 1 month
- ☒ b. Methotrexate 12.5 mg a week with liver function tests in 1 month
- c. Anti-histone antibodies, anti-DS-DNA, and complement levels
- d. Prednisone 60 mg a day and follow up in 2 weeks

Preferred DMARD in RA \Rightarrow Mtx
" " " RA in pregnancy \Rightarrow HCO

hydroxychloroquine

Tertiary syphilis.

32. Treatment of choice for late cardiovascular syphilis is?

- a. Benzathine penicillin 2.4 million units in single dose i.m
- ☒ b. Benzathine penicillin 7.2 million units in three divided doses i.m
- c. Benzyl penicillin 12-24 million units for 21 days i.m
- d. Tetracycline 2g daily

Benzathine penicillin

2.4 mu weekly once x 3 weeks

1° syphilis

single dose Benz. penicillin

Neurosyphilis : Penicillin G iv x 2 weeks

* Benzathine Penicillin i.m. monthly basis
⇒ RF/RHD ✓

↓
Single dose: 1^o syphilis ✓

↓
Once wk x 3: Cardiovascular syphilis ✓

* Pen G x 2wk: Neurosyphilis

severe emotional Trauma

33. Mrs Sharma collapsed at the cremation of her husband.
When brought to the hospital, she was declared dead. What is the possible diagnosis?

- a. Broken heart syndrome / Tako Tsubo cardiomyopathy
- b. Massive pulmonary embolism
- c. Heart block
- d. Aortic dissection

↑
mimics: STEMI

→ record ECG: 24 HOURS

34. 80-year-old person Holter is found to be having atrial fibrillation. What calculation should be used to evaluate for need for anticoagulation in this patient?

→ Twitching: Clots / stasis → embolic stroke

~~a. NIH score~~ National institute of Health score: STROKE

b. ABCD2 score Risk OF STROKE

c. CHADS2- VaSc score : Need for anticoagulation
2 points

d. Cockcroft Gault formula → eGFR

CHF, HTN, Age, DM, STROKE HISTORY

Vascular disease: PAD, Sex category

1 point

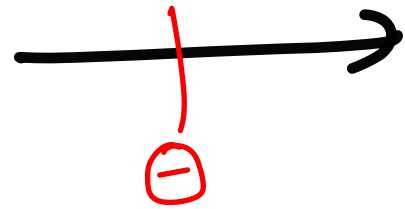
A. Fib:

BP ↓

Rate control
Esmolol / ibutilide

— Rhythm control

CHATS ⊕



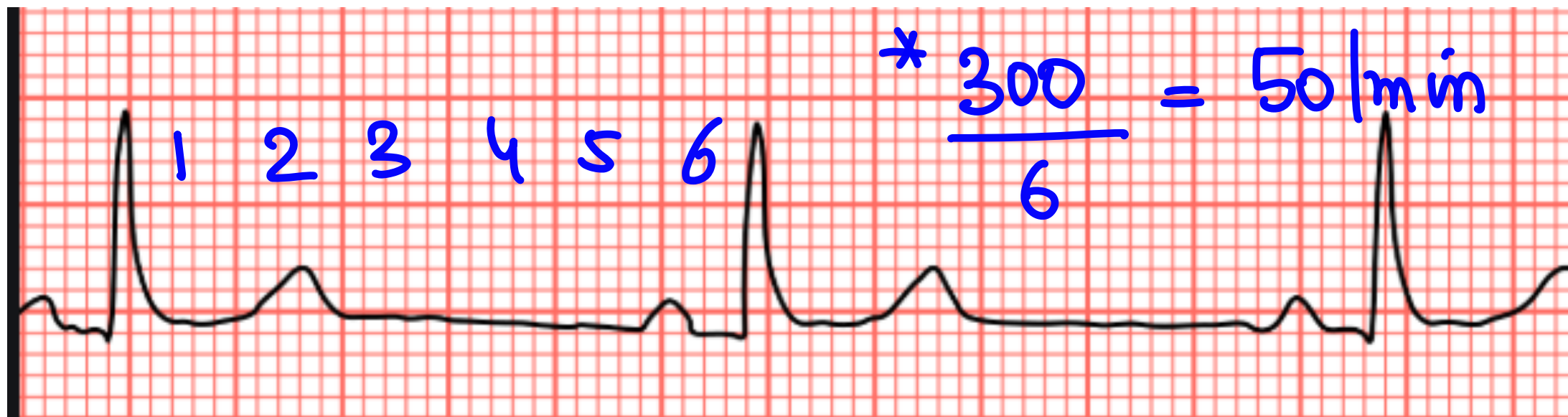
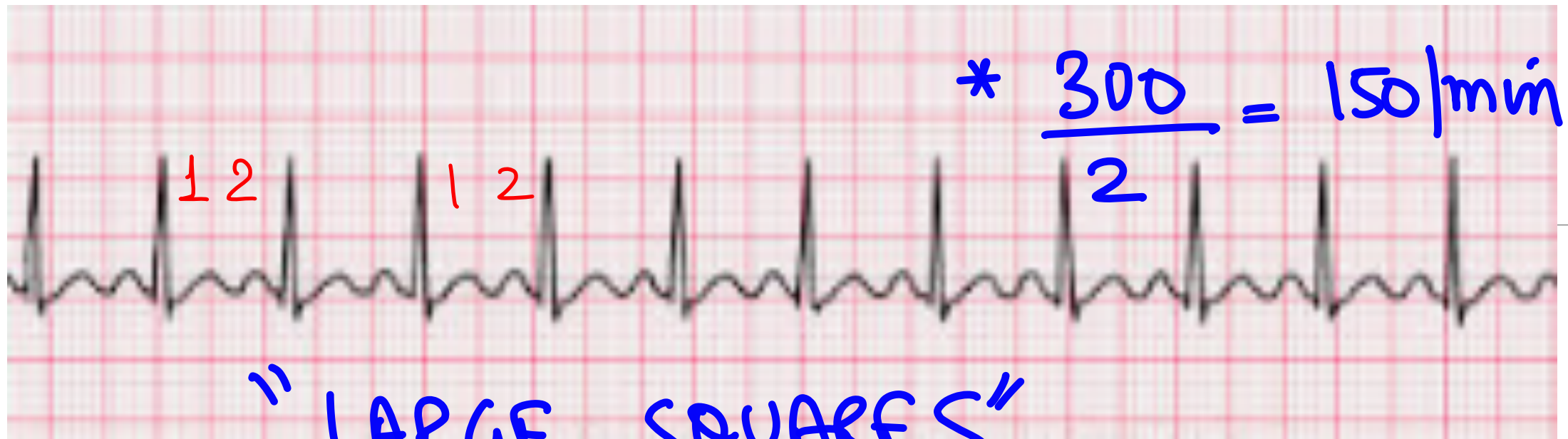
embolic stroke

CHADS₂ VASc SCORE

Rx: NOAC: dabigatran
Rivaroxaban
warfarin

35. Which of the following can be used to calculate heart rate from an ECG?

- a. (Number of large squares in one R-R interval)/300
- b. 300/ (Number of large squares in one Q-T interval)
- c. 300/ (Number of large squares in one R-R interval)**
- d. (Number of large squares in one Q-T interval) / 300



ON EXERCITION

36. A 58-year-old man presents to you complaining of chest pain. The pain occurs when he walks to the corner shop on his lunch break and disappears within a couple of minutes when he stops to rest. Clinical examination is normal except for mildly elevated blood pressure at * 145/85. An ECG shows normal sinus rhythm. What is the most appropriate investigation?

Chronic stable angine

~~A. Fasting blood lipids: atherosclerosis~~

mv: TMT

b. Urgent invasive coronary angiography

Stress echocardiography

~~c. Repeat ECG in 1 week~~

Sestamibi scan

d. Sestamibi Scan : Non invasive

Thallium scan

Coronary angiography

Rx
↓

CSA	Metoprolol	abiximab
UA	NTG (ABE-MOAN)	Beta blocker
NSTEMI	NTG	enoxaparin
PA	NTG/CCB	morphine O ₂
STEMI	1° PCI	Aspirin NTG

MS = P.M.B.V

Ch CHF = ACEI + β Blocker * MR =

HOCM = PROPRANOLOL * AS =

37. A mother brings her 5-year-old boy to see you as a GP. On examination, he has red eyes, dry, cracked lips and a rash on his hands and feet. He also has cervical lymphadenopathy. What is the most important investigation to rule out a serious complication of this condition?

a. Blood pressure

b. ECG

c. Echocardiogram

d. Blood tests for autoantibodies

D/D 1. Infectious Mononucleosis

2. Kawasaki: Coronary A aneurysm

Muco cutaneous LN syndrome

Red eyes

future: can develop MI (25%)

Rash

LN

DOC: phenoxybenzamine

38. A 20-year-old hypertension patient has been diagnosed as a case of pheochromocytoma with positive biochemical evidence. What is the next step in work up of this patient?

- a. CT Abdomen
- b. Perform urinary VMA levels
- c. Perform adrenal vein sampling
- d. MIBG scintigraphy



Imaging

1. MRI abdo
CT

2. MIBG

3. PET-DOPA

pheochromocytoma: PHD

Palp N HTN diaphoresis

Screening: 24 hr U. metanephrine

IOC: plasma fractionated metanephrine

39. Blunted y descent is seen with?

subpulmonic stenosis

a. Tetralogy of Fallot

b. Tricuspid stenosis

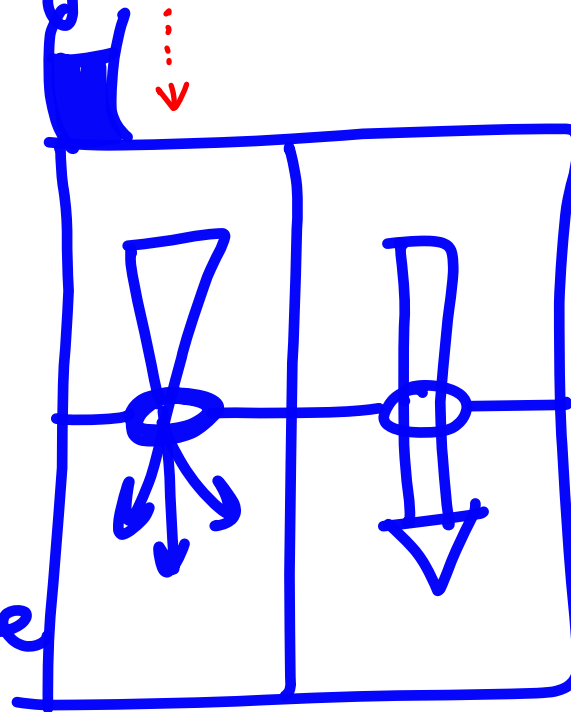
c. Tricuspid regurgitation

d. Tricuspid atresia

LARGE a wave

LARGE cv wave

$y = V$. diastole (relaxation)



y wave in JVP: V. Relaxation

- * steep y \Rightarrow C.P
- * absent y \Rightarrow C. Tamponade
- * blunted y \Rightarrow T.S

Large a
TS, PS, PAH
TOF

Comm a
↓
complete H.
Block

40. Best for myocardial viability and inflammation imaging?

a. PET

b. SPECT thallium 201

c. SPECT sestamibi Tc99

d. Coronary angiography

→ Hibernating myocardium / CSA

PET = distant Mets
= extra-adrenal pheo
= myocardial viability

18 FDG

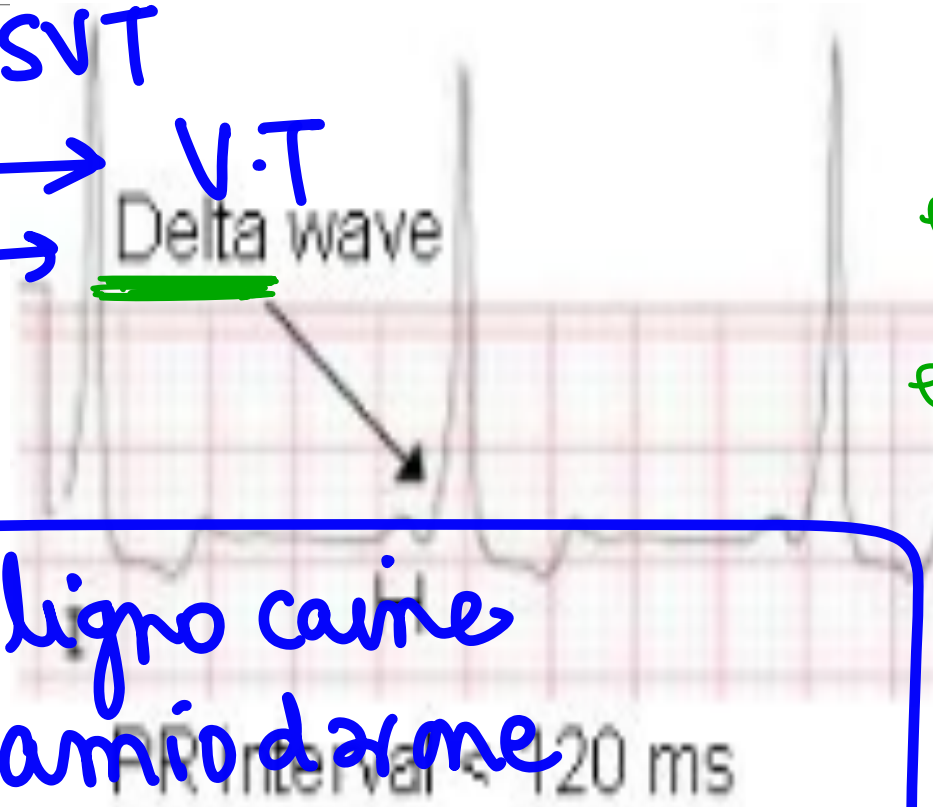
41. Best drug for Wolf Parkinson white syndrome

a. Adenosine → PSVT

b. Amiodarone → V.T

c. Lignocaine →

d. Procainamide

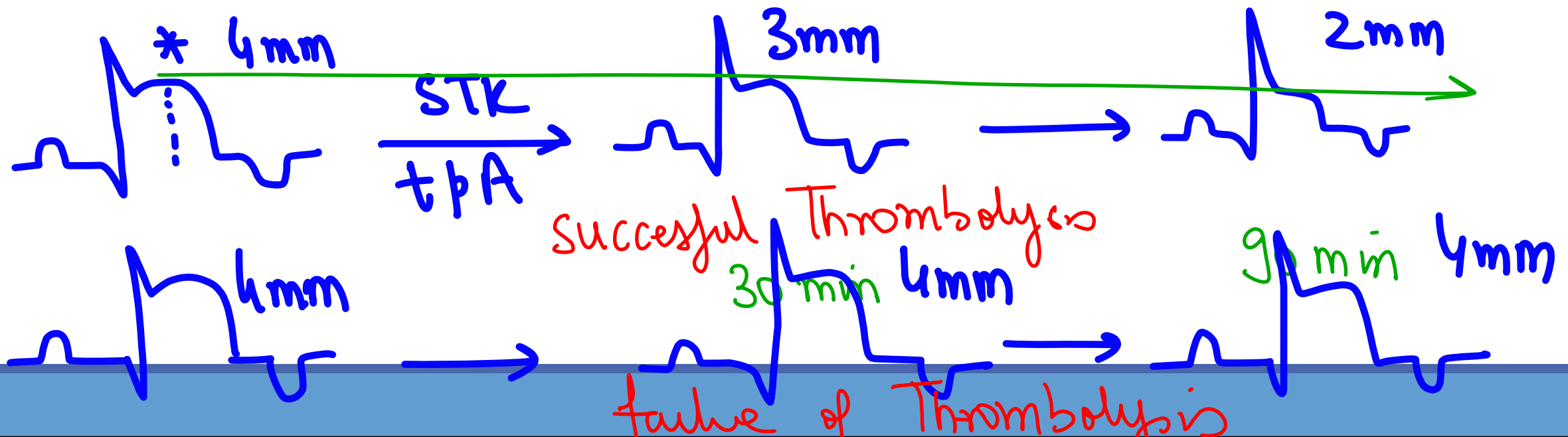


delta wave
eg: NREM stg III
eg: WPW

Post MI VT : lignocaine
Stable VT: amiodarone
pulseless VT: defibrillator

42. Rescue P.C.I is done for which of the following?

- a. Persistent chest pain with ST elevation > 30 min after thrombolysis
- b. Persistent chest pain with ST elevation > 60 min after thrombolysis
- c. Persistent Chest pain with ST elevation > 90 min after thrombolysis: *failure of STK*
- d. Persistent Chest pain with ST elevation for > 120 minutes after thrombolysis



Rx: / warm shock = NE
 \ cold shock = epinephrine

43. Septic Shock is defined as?

- a. Shock persisting > 1 hour after crystalloid administration
- ☒ b. Shock persisting > 1 hour after high dose vasopressors
- c. Shock persisting > 1 hour after colloid administration
- d. Shock persisting > 1 hour after massive blood transfusion

* S.I.R.S : FEVER / TLC \uparrow / HR \uparrow / R. Rate $\uparrow = \frac{2+}{4}$

* sepsis : SIRS + positive bld culture

* septic shock : sepsis + $\frac{\text{BP} \downarrow > 1 \text{ hr}}{\text{inhibitor of dobutamine dopamine}}$

44. Waist to hip ratio that increases risk of heart disease is?

~~a. > 0.80 in male~~

b. > 0.80 in female

~~c. > 0.85 in male~~

d. > 0.85 in female

45. Pheochromocytoma produces all except?

a. Nor-epinephrine ✓

b. Secretin

c. Vaso-active intestinal polypeptide ✓

d. Calcitonin ✓

Major catecholamine in our body : Epi
" " " pheo : NE

PARAGANGLIOMA : extra-adrenal pheo

46. The following patient has presented after chest trauma. On examination crepitus is felt. The clinical diagnosis is?

a. Subcutaneous Emphysema

b. Gas gangrene : PUTRID D/S

c. Acute tubular necrosis

d. Hyperbaric Decompression sickness

ANURIA

↑ CREATININE

↑ K⁺, M. acidosis

↓ deep sea divers



Sc emphysema

lung injury: air leak

SIPPLE Syndrome

47. Which of the following is correct about MEN 2 A Syndrome?

- a. Parathyroid adenoma
- b. Pituitary adenoma
- c. Pancreas adenoma
- d. Cavernous angioma

P = Parathyroid adenoma

P = Pheochromocytoma

M = Medullary Cc
Thyroid
(Calcitonin)

48. Fulminant diabetes mellitus is seen in?

a. Diabetic ketoacidosis

b. Coxsackie B virus

c. Non Ketotic hyperosmolar coma

d. Autoimmune pancreatitis

* fulminant hepatitis ⇒
* // diabetes ⇒

HDV: superinfection
Coxsackie B virus
↓
viral myocarditis

49. Modified Duke's criteria are used for diagnosis of?

- a. Infective endarteritis
- b. Infectious mononucleosis
- c. Inflammatory myopathy
- d. Infective endocarditis

DUKE STAGING \Rightarrow Co Rectum
DUKE CRITERIA \Rightarrow I.E

50. Which of the following shall be seen with use of a small size BP cuff?

- a. False elevation of BP
- b. Falsely low value of BP
- c. Cancels the effect of calcified arteries
- d. Increases trans-arm impedance

$$\text{reading} \propto \frac{1}{\text{Size of cuff}}$$

51. Elderly male patient has presented with recurrent falls.
Which of the following medicines is responsible?

postural
* hypotension

- a. Prazocin
- b. Metformin
- c. Acarbose
- d. Thiazides

Elderly, HTN, B.P.H = Prazocin (α -Blocker)

52. Which of the following test is used for diagnosis of DIC?

- a. Fibrin Degradation Products
- b. Activated partial thromboplastin time
- c. Prothrombin time
- d. D- Dimer assay : Screening test

FDP : DIC

D-dimer assay : PE

PE : D-Dimer assay

* PE

Screening : d-dimer assay

IDC : CTA

RxDC (Massive) tPA

Heparin

53. On putting an Internal jugular vein catheter, a patient has developed sudden onset severe respiratory distress. Clinical diagnosis is?

☒ a. Pneumothorax

b. Sepsis

c. ARDS

d. Mendelson Syndrome

Sudden onset R.D ++

1. Smoker : Pneumothorax
2. Central line : " "
3. post op : PE
4. # long Bones: fat embolism syndrome

Umbilical pain → RIF: acute appendicitis

54. 40-year-old alcoholic has presented with severe epigastric pain radiating to back. CT abdomen was done.

Diagnosis?

- a. Peptic ulcer disease
- b. Mallory Weiss syndrome
- c. Boerrhave syndrome
- d. Acute Pancreatitis

D/D epigastric pain*

1. PUD

2. Menetrier

3. volvulus

4. Pancreatitis: Rad^N To back

* D/D RUQ pain
Cholecystitis, Mirizzi
Budd Chiari
CHF

flank pain → Umbilicus
Rx: Renal colic

55. All of the following cause acute renal failure except:

a. Pyelonephritis : acute

b. Snakebite : VIPER: Hemoglobinuria

c. Rhabdomyolysis myoglobinuria

d. Analgesic nephropathy



CKD

56. Patient on insulin in CKD stage 4. What is dose adjustment of insulin required?

- a. Increased insulin
- ☒ b. Decreased insulin
- c. Normal insulin
- d. Add DPP – 4 inhibitors

insulin excreted via kidney



dose reduction!

80%. Total calculated dose

57. Tropical splenomegaly is seen in

- a. Malaria
- b. Kala azar
- c. Brucella : UNDULANT FEVER: CASTLEBERRY Medium
- d. Q-fever : COXIELLA BURNETII

Massive splenomegaly: 1. Kala Azar
2. CML
3. GAUCHER

58. Chikungunya presents as?

- a. Fever, myalgia and petechial rash → dengue
- b. Fever, myalgia with lymphadenopathy → inf. mononucleosis
- c. Fever, myalgia and joint pains
- d. Fever, meningismus and haemorrhagic complications

↳ WATERHOUSE friedsohen
N. meningitis

* FEVER, S.O.B, MYALGIA = Covid - 19
pneumonia

59. Which of the following leads to palpitations, heat intolerance and pre-tibial myxedema?

a. Hypothyroidism primary

b. Hypothyroidism secondary

☒ c. Primary thyrotoxicosis

d. Secondary thyrotoxicosis

GRAVE'S : Thyroid gland : $T_4 \uparrow$ $T_3 \uparrow$

↳ pituitary problem / adenoma : $TSH \uparrow$
 $T_4 \uparrow$
 $T_3 \uparrow$

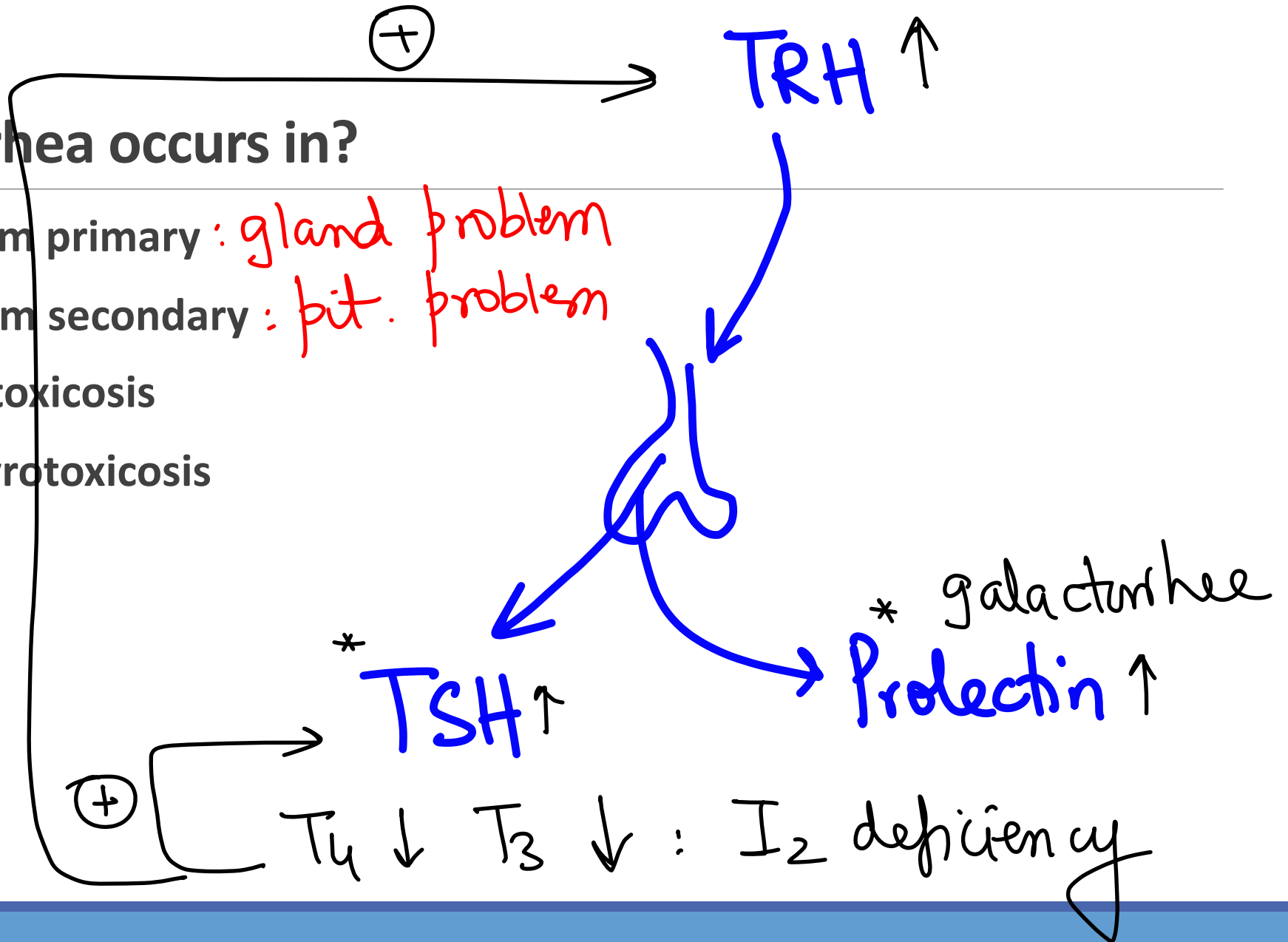
cold intolerance + myxedema

*
 $TSH \downarrow$
 $T_4 \uparrow$ $T_3 \uparrow$

PROLACTINOMA

60. Galactorrhea occurs in?

- a. Hypothyroidism primary: gland problem
- b. Hypothyroidism secondary: pit. problem
- c. Primary thyrotoxicosis
- d. Secondary thyrotoxicosis



RAREST SUBTYPE OF DM

61. Best treatment of M.O.D.Y is?

a. Recombinant insulin

b. Metformin

☒ c. Glipizide

d. Sitagliptin

Type 1 DM	insulin
1.5 DM	glipizide *
2 DM	metformin
MODY	glipizide *

62. MEN I leads to all except

- a. Hypergastrinemia ✓
- b. Hypercalcemia ✓
- c. Hyperprolactinemia ✓
- d. Excess catecholamines

↓
pheochromocytoma
MEN 2A: supple sym

Pit adenoma : PRL ↑

Parathyroid " : PTH ↑ : ↑ Calcium

Pancreatic " ZES: gastrin ↑

63. MEN II occurs due to defect of?

a. K-Ras

b. P16

c. Ret proto-oncogene : *SIPPLE syndrome*

d. Rb

SIMMOND disease: Non obs cause of damage to pituitary

** pit. APOPLEXY*

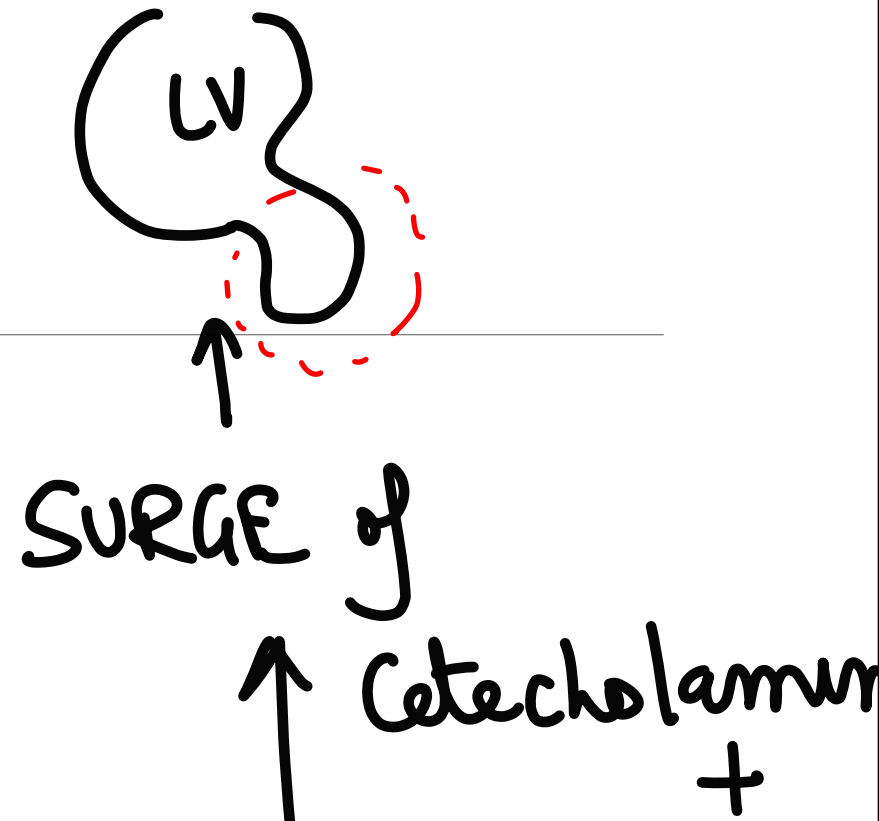
Trauma | HTN | AVM rupture

64. Broken heart syndrome is?

- a. Arrhythmogenic RV dysplasia
- b. Tako-tsubo- cardiomyopathy**
- c. Restrictive Cardiomyopathy
- d. Misnomer

MC → DCM
Rcm
HOCM
TTCM

alcohol
amyloidosis
 β -myosin gene, AD
severe emotional Trauma



Tendency for Tachyarrhythmias

65. Pacemaker is required for?

a. HOCM

b. Brugada syndrome

c. Long QT syndrome

d. Stokes adam syndrome

Implantable cardioverter defibrillator

3rd degree Heart block
Complete Heart Block

"SS-A"

66. Anti-Ro antibody leads to?

- a. Photosensitivity
- b. Drug induced lupus
- c. Lupus cerebritis
- d. Lupus nephritis

Transplacental transfer
SLE MOTHER



FETUS

SAN

~~ANA~~

BOTH

"Complete heart
Block"

*

SS-B

lupus
anticoagulant
↳ R. abortions

67. ST segment depression is seen in?

- a. Hyperkalemia
- ☒ b. Hypokalemia
- c. Hypercalcemia
- d. Hypocalcemia

$K^+ \propto \text{ST segment}^*$

$K \uparrow$: ST elevation

$K \downarrow$: ST depression

Tetany: QT prolongation

Hypercalcemic crisis: QT shortening

$Ca^{++} \propto \frac{1}{\text{QT interval}}^*$

TRAUMA
CAR CRASH

Oat cell Ca lung

68. Non pulsatile elevated JVP is a feature of?

- a. Cardiac tamponade
- b. Pericardial effusion
- c. Acute pericarditis
- d. Constrictive pericarditis

C. Tamponade

P : P. PARADOXUS

BP : ↓↓ (OBSTRUCTIVE)

S₁S₂ : MUFFLED

JVP : NON PULSATILE

Rx : PERICARDIOTOMY

69. Lente insulin is?

a. Rapid acting insulin

b. Short acting insulin

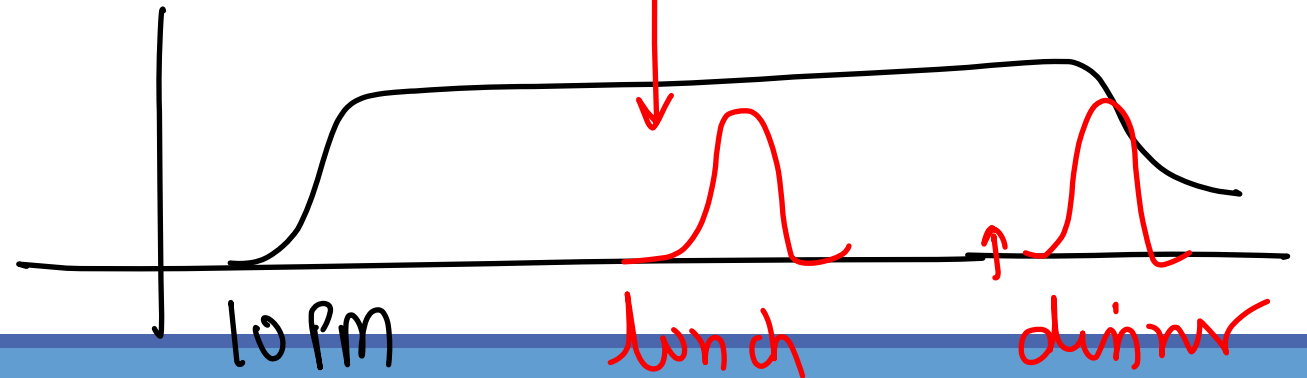
c. Intermediate insulin : **LENTE**

d. Long acting insulin

LISPRO / ASPART

REGULAR

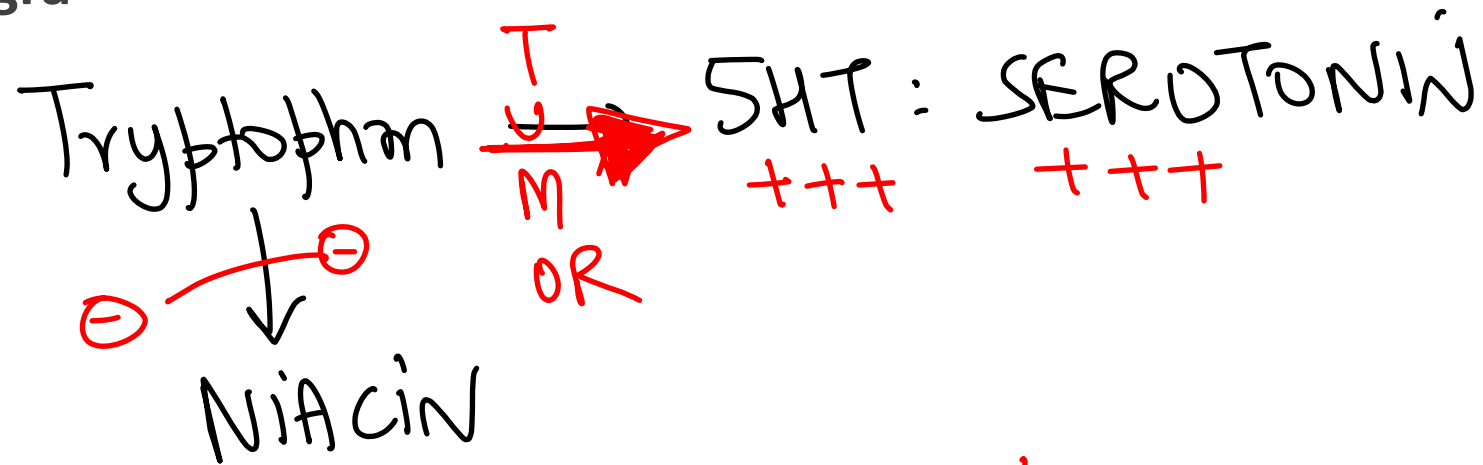
PEAKLESS INSULIN \Rightarrow GLARGINE / DETEMIR



70. Carcinoid Syndrome leads to?

- a. Hypertension
- b. Diaphoresis
- c. Hyperglycemia
- d. Pellagra**

SEROTONIN:



CASAL'S Neckbe

71. Best test for diagnosis of acromegaly? GH ↑

a. Glucose challenge test

b. Insulin like growth factor 1 levels

c. Insulin like growth factor 2 levels

d. GHRH levels

→ Screening test for acromegaly.

① glucose 100 gm : GH production: Suppressed
pit. Tumor : // // : GH levels : elevated
failure To suppress GH via glucose
Challenge Test

dopamine $\xrightarrow{\ominus}$ PRL $\xrightarrow{\ominus}$ LH/FSH

72. Best for management of Prolactinoma?

a. Trans-sphenoid surgery

b. Bromocriptine

c. Octreotide

d. Cyproheptadine

galactorrhea

* MACRO Adenoma / Bitemporal Hemianopia : Sx
* Drugs: Bromocriptine / Cabergoline

* Shrink Tumor : OCTREOTIDE
LANREOTIDE

73. Not a symptom of hypothyroidism?

- a. Psychosis : myxedema madness
 - b. Hair loss : " Scalp
 - c. Serous cavity effusion : Pleural effusion
 - d. Pre-tibial myxedema
- GRAVE'S

lymphedema

Mini mental Score examination

74. MMSE score is used to diagnose?

- a. Stroke
- b. Esophageal varices
- c. Depression
- d. Dementia

< 24 : dementia

30 items

21-24 | mild

10-20 | mod

< 10 | severe

Parietal #
Temporal #

LOC: AD

* fMRI

DOC AD: Donepezil

memantine | Rivastigmine

75. Weight gain is a feature of all except?

- a. PCOD : *insulin ↑ : wt gain*
- b. Cushing syndrome *cortisol ↑ : "*
- c. Hypothyroidism *→ T₃ T₄ ↓ BMR ↓ : "*
- d. Pheochromocytoma
→ CATECHOLAMINES : wt loss

wt loss : Addison / pheochro / GRAVE

