



*Aims.
2015/16*

MEDICINE PYQS INICET /AIIMS

Medsynapse by Dr. Nikita



Which of the following do not usually cause reduction in Diffusion Lung Capacity of Carbon Monoxide?

DLCO



DL_{CO}

CO → diffusion ltd.
very less conc. in blood.

a) Emphysema ↓

~~b) Asthma~~ ↑

c) Pulmonary vascular obstruction ↓

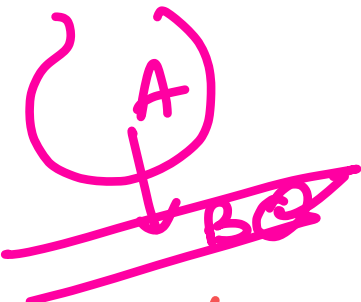
d) Interstitial lung disease ↓ → ↓ fibrosis - Thick membrane.



MEDSYNAPSE
Where Concepts Meet Mnemonics

① ↑ CO in blood ^{↳ LOLLO.} → ↓ DLCO
↳ eg. smoker

② anemia - ↓ DLCO.

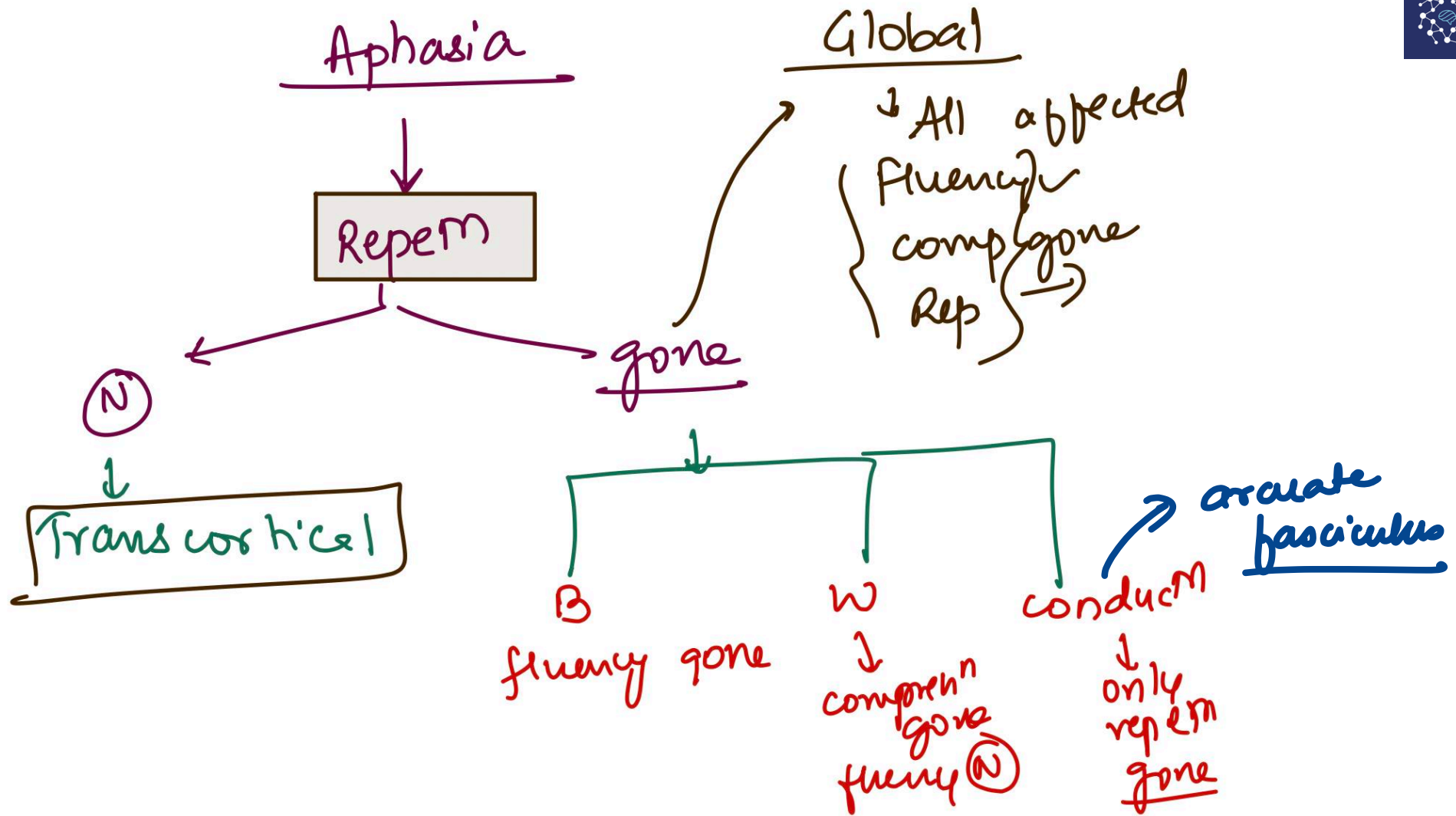


→ pulm Hx → DLCO ↑. (alv. Hx - binds CO)
→ emphysema → ↓ (surface of area) ↓.
→ pulm embolism } pulm HTN → ↓ vascularity -
- asthma - ↑ DLCO → ↑ airway vascularity ↓ / hyperinfl.



A man comes with aphasia. He is unable to name things and **repetition is poor**. However comprehension, fluency and understanding written words is unaffected. He is probably suffering from:

- MEDSYNAPSE
Where Concepts Meet Memories
- a) Anomic aphasia → X.P.
 - b) Broca's aphasia ϕ → broken speech.
 - c) Transcortical sensory aphasia Xρ - Reptn (N)
 - d) Conduction aphasia





Hyperdynamic circulation is seen in all except:

- a) Anemia ✓
- b) Beriberi ✓
- c) ~~Cor pulmonale~~
- d) AV fistula ✓



wet - cardiac

B12 -

∴ Heart failure ±

① Paget's

② vein of Galen

(Neonate → hydrocephalus & Heart fail)



Which of the following is false about Transfusion-Related Acute Lung Injury?

ⓀⓀ
Blood transfusion

VS TACO
- cardiac overload
 ↑ JVP, ↑ BP
- Diuretics ✓
TRALI
- \bar{C} in 6 hrs
- Donor plasma → Ab. WBC/HLA
- ~ARDS → Noncardiogenic pulm edema.

- a) Develops within 6 hours ✓
- ✓ b) Diuretics are drug of choice ~~no~~ avoided! CVP - not ↑, BP ↓ ✓
- c) It's a cause of noncardiogenic pulmonary edema ✓
- d) Plasma is more likely to cause it than whole blood ✓



All these are true about the procedure in which this needle is used except:



→ Jamshidi^o
Bone marr.
asp+biopsy

- a. No breath-holding is required for the procedure
- ✓ b. Platelet count of less than 40,000 is a contraindication
- c. It is useful in diagnosis of infiltrative and granulomatous disorders
- d. It can be done in both prone and lateral positions



↓
Salah
 ↳ side screw ⊕

③ Bm



↳ Klima



↓
Jamshidi
Sky-blue

adults : PSi's > ASi's
 iliac crest
 child : tibia

aspirin
↓
Dry tap → Biopsy



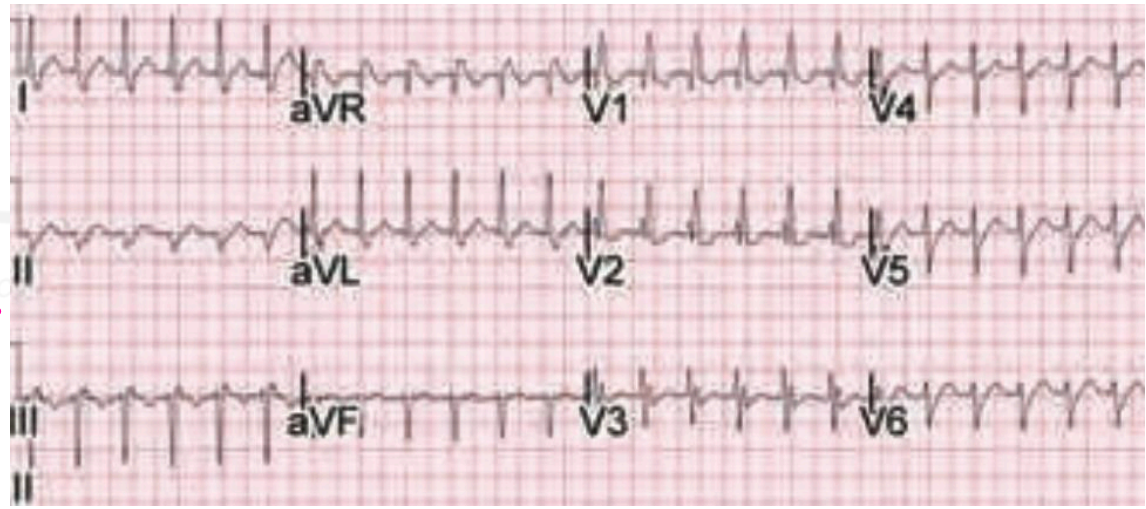
- ① HCL
- ② myelofibrosis
- ③ aplastic anaemia
- ④ AML - M7.



A 52 years old diabetic male presents with palpitations to the AIIMS emergency. On examination, the systolic blood pressure was 70 mm Hg. The following was his ECG recorded in emergency. What is the immediate next step in management?

unstable

- a. Electrical cardioversion
- b. Adenosine - *if stable*
- c. Amiodarone
- d. Immediate PCI



PSVT →
• narrow QRS
• RR reg.
• P wave x 100

PSVT

if

stable

→

vagal (carotid - U/L)

↓

adenosine

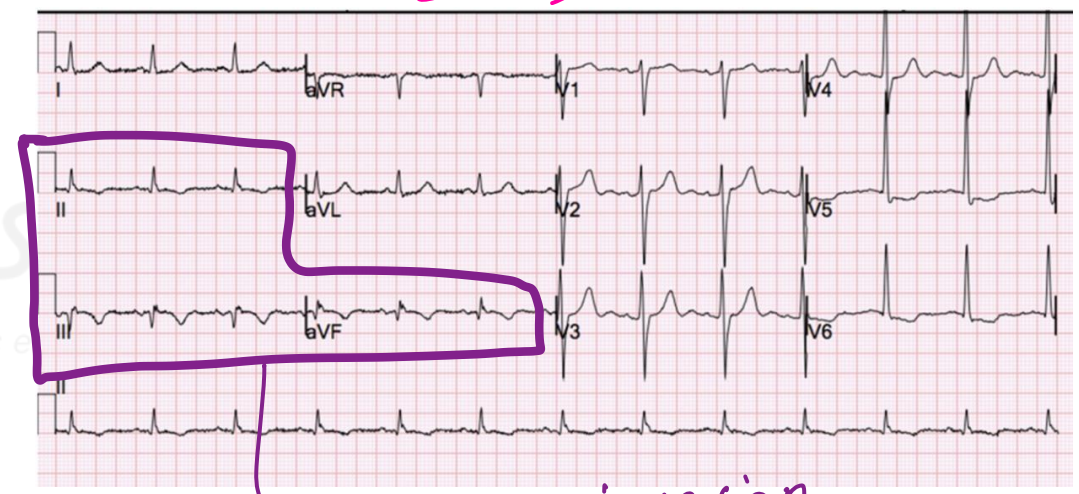
↓

CCB / β ⊖



A 76 years old male patient presents to the AIIMS emergency with **retrosternal chest pain for 6 hours**. The following EKG was taken. What will be your primary management?

STEMI → PCI > thrombolysis



T wave inversion

NSTEMI

↳ anticoagulation

unstable ang / NSTEMI → T inversion
 ↳ Troponin ↑
 ↳ Trop. (N)

- a. Primary PCI
- b. Thrombolysis
- c. Abciximab
- d. Low molecular weight heparin

STEMI

NSTEMI
↓
subendocardial
(most ischemia sensitive)

STEMI
↳ transmural
infarct

partial occlusion

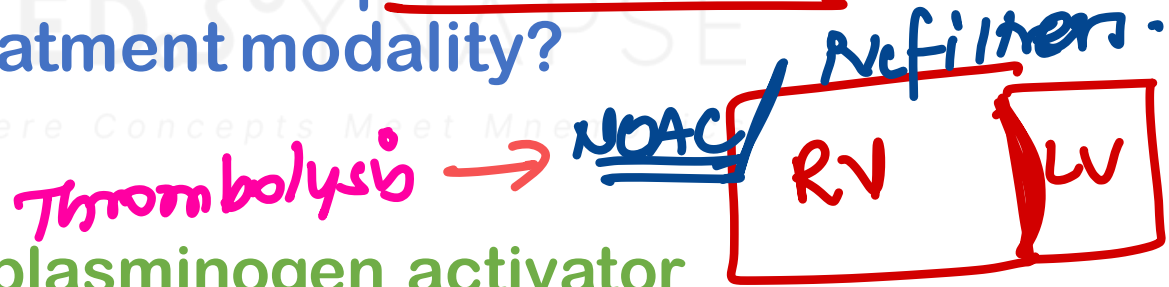
Q mi → NTG carefully → inf wall mi
(BP ↓ +)

complete



A 40 years old female presented with acute onset shortness of breath. She has a history of nephrotic syndrome 1 year back and recent prolonged air travel. She has a BP of 90/60 mm Hg, heart rate of 115 per minute and sinus tachycardia on ECG. A 2-D echocardiogram revealed dilation of right ventricle with bulging of the interventricular septum to the left. What will be the primary treatment modality?

- a. Thrombectomy
- b. Intravenous tissue plasminogen activator
- c. Unfractionated heparin - IST
- d. IVC filter



↓BP → massive PTE

Thrombolysis

• if not NOAC → inc filter

◦ Thrombolysis > thrombectomy
massive PE

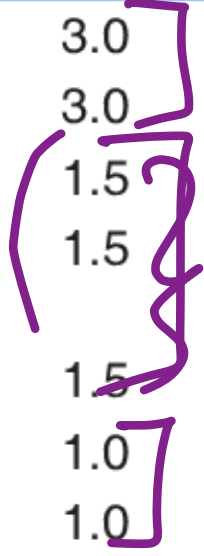


Wells

Features

Score (points)

- Clinical signs and symptoms of DVT leg, signs
- No alternative diagnosis → most probable Δ
- Heart rate >100 beats/min
- immobilization ≥ 3 days or surgery in the previous 4 weeks
- Previous DVT or PE
- Hemoptysis → oral blood
- Malignancy with active treatment in the past 6 months or under palliative care
- Pretest clinical probability
 - PE unlikely
 - PE likely



EMBOlism

MS → 3 ✓

NO - 1 ✓

Rest 1.5

High risk → CTPA

low risk → d dimer

renal fail / preg → V/Q

PE = Pulmonary embolism, DVT = Deep vein thrombosis



A second-year PG resident tells you to perform an ABG of a patient. All the following are true about performing an ABG except:

→ PO₂ → wrist in Extended posⁿ

Remove air bubbles → false ↑ PO₂ flushed ✓

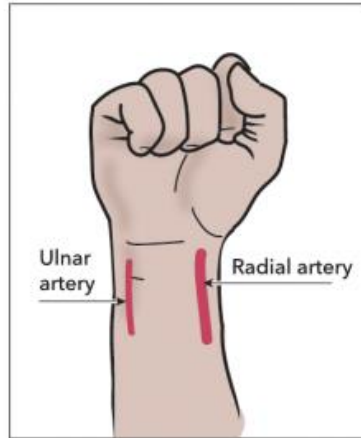
- ✓ a. Before performing the ABG, syringe should be loaded with 0.3 cc of heparin → false PO₂
- b. Normal pH, HCO₃ and PCO₂ levels may not indicate absence of an acid-base imbalance → s/o mixed acid base disorders
- c. A different site should be tried if modified Allen's test is negative ✓
- d. Radial artery is the preferred site ✓



The Modified Allen Test

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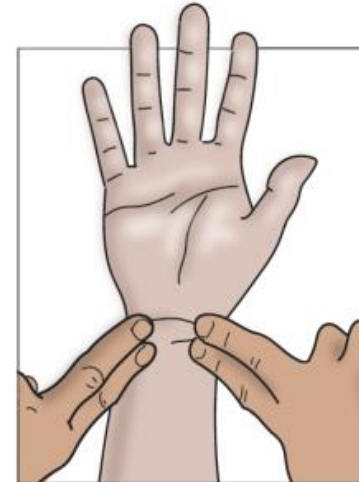
This test is used to check the overall blood supply to the hand.




Locate the ulnar and radial arteries. Have the patient make a tight fist for about thirty seconds.



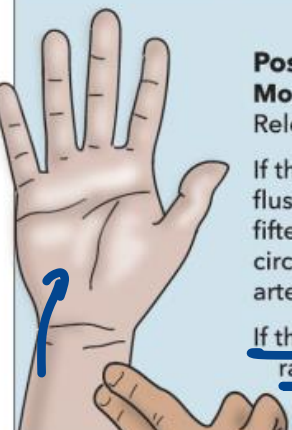
To obstruct blood flow, press down on the ulnar artery with two fingers. At the same time, press down on the radial artery.



Tell the patient to unclench; their palm should blanch. If it doesn't, you are not applying enough pressure -- start again.



Negative Modified Allen Test
Release the pressure on the ulnar artery.
If the hand flushes within five to fifteen seconds, this shows that the hand has good blood flow.



Positive Modified Allen Test
Release the pressure.
If the hand doesn't flush within five to fifteen seconds, the circulation of the ulnar artery is not sufficient.
If this is the case, the radial artery should not be punctured.



A glass factory worker presented with complaints of numbness in hands and feet, generalized weakness and constipation. Radiograph showed linear lines on metaphyses of knee and wrist joints. How will you diagnose this patient?

↑ RBC protoporphyrin



lead poisoning

- a. Serum mercury levels
- b. Vitamin D levels
- c. RBC cholinesterase levels
- ✓ d. Amino levulinic acid levels in urine

metaphy-bands
 ABCDEF
 Dense

lucent → leukemia
 ALA dehyd
 → Ferrochelat

↳ no heme form.
 ⊖ heme
 ↑ ALA synthase (PGE)