

(General ولا اقو العجل ال Local Exa)

(Chest Examination)

① Inspection:

① shape of chest

Pectus excavatum
(Funnel shape chest)

Pectus Carinatum
(Pegon Shape chest)
(مصر الخ)

Parrel shape Chest

Flat chest

(depression of lower 1/3 of Sternum)
(غرضه) هو عبارة عن (بشره)

As in:

① Antero-Posterior diam $\approx 7-5$

① AP diameter $\approx 3-5$

② look to Xiphoid angle

wide $\rightarrow$ yes Parrel
Not wide (acute angle) $\rightarrow$ Not parrel Standing

* Rickets
* Chronic Respi disease in childhood
as: COPD

(resistant to air flow)

As: emphysema + Obstructive lung disease.

Prevent lung to expand
($\downarrow$ lung compliance)

Congenital Acquired
(مع صفة / بدون صفة)
Compression (نقرة حلقية)

(Marfan synd.) (صانع لا صفة لروية)

② Symmetry

$\Rightarrow$ chest is

Symmetrical in movement
asymmetrical.

* In all lung diseases asymmetrical side is the affected (diseased) side ..

حركة زبانية (أعلى)
(Pulging)

- pneumothorax
- pleural effusion
- huge mass.

(Asymetry)

تقيص حركة (Retraction)

- Fibrosis
- lung collapse

pneumoectomy or lobectomy

scab

C) Type of Respiration.

♀ Thoracoabdomin

♂ Abdominothoracic (in Normal)



* If this is seen in Males

it may indicate to :

((COPD or Pneumonia))

D) Skin.

- ① Hair distribution.
- ② Scars
- ③ superficial veins
- ④ Accessory umbilical.
- ⑤ Spider nevi
- ⑥ Campel de' Morgan.
- ⑦ Abnormal pigmentation.
- ⑧ Prominent chest / breast.

② Palpation :-

(Superficial)

- Masses
- Surgical Markers.
- Temp.

(Deep)

Expansion

Trachea

Apex of heart

①

Trachea

② Tug

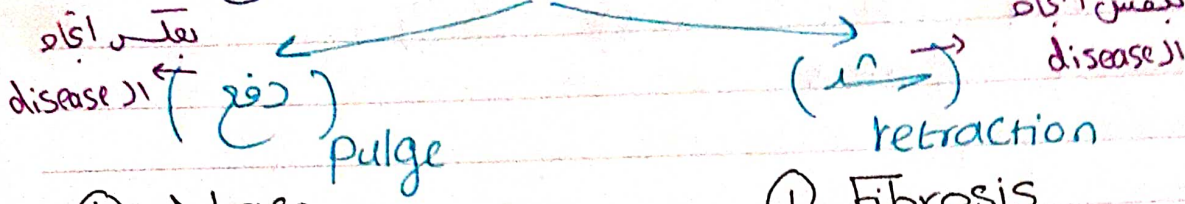
③ Cricosternal distance.

في الحادي / الطبيعي يتكون ← (Slightly shifted to the Rt) ...

① Trachea assessment :-

(A) Shifted trachea :-

((انقيص يا تضيق او تضيق))



① Mass

② هوا

(Pneumothorax)

③ سي

(Pleural effusion)

① Fibrosis .

② Collapse .

③ Pneumectomy .

② Costosternal distance :-

الطبيعي انفا فيه (2 - 3 اصابع)

خط ابي على Adam's apple ← ينزل لعنزال Cricoid cartilage ، لما أحس ان Cartilage بخط الهابط بالعرض ، فوق كتم اصبع طلع معي ...

له متى تقل ط لافه ؟ (In obstructive lung diseases)

③ Tracheal Tug

Suprasternal notch

خط اصبعي في الـ tracheal rings

(-ve)

(+ve)

in Normal

في مرض الـ (obstructive lung disease)

كقريباً لا يتغير موقع اصبعي

لاحظ انو اصبعي مع تنفس طرفين في (tracheal ring) يتنزل بقية اصبعي

يعني 2 كافي حبس (2 tracheal ring)

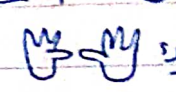
④ Apex of Heart :-

ينزل طوى صدر طرفين واري هذا Pulse هناك

مرتبة او لا ، بعديه خط ابي (tips of fingers)

وحدد مكانها ، بعديه بطول وبعده وحبس الـ 5th ICS ، وبفوق هل Shifted ام لا ...

③ Chest Expansion . ((N = 3-5))

- فحص على ٣ مَوَاقِعَ :
- Supramamary (Apex of lung) 
 - Mammary 
 - Inframammary. " "

قد تكون diminished في عتة أمراض مثل :
Obstructive lung disease
lung fibrosis.

③ Percussion ∞

على 6 مَوَاقِعَ :

- a) supraclavicular
- b) clavicular
- c) supramammary
- d) mammary
- e) inframammary
- f) axillary ← upper
lower.

Notes ∞

- ① Normal Sound is Resonance.
- ② Abnormal Sound in Percussion :

* Hyperresonance .

- ↳ Pneumothorax
- ↳ COPD

* Dullness .

- ↳ fibrosis
- ↳ Consolidation
- ↳ mass
- ↳ Collapse.

* Stony dullness .

- ↳ Pleural effusion.

③ Shifted dullness.

← يعني في حالة الـ

Hydropneumothorax

(← كانه في Pleural effusion . يعني كساعة ضار في مكان)

③ ضار في مكان فاعلم
إلا لو انطبقت مني :
مثل :-

↳ Tidal Percussion of liver

↳ Trubes Area .

(resonance وتكون في طاسه ..)

4) Auscultation :

هذا كذا في السمع، أنصت في 14 سكر.

- ① Breath sound.
- ② Intensity of breath.
- ③ Added Sounds
- ④ Vocal resonance.

(³spira > ¹expiration)

1. Breath sound.

↳ In Normal : (I say); There is visceral sound.

↳ Abnormal

↳ Harsh visceral ~~sound~~ breathing.

= (Prolong expiratory visceral breathing)

هذا يكون في حالات الـ (Whise)

↳ Bronchial breathing.

بشيء على الـ (Manubrium of Sternum)

يكون عبارة عن : (inspiration Gap expiration)

فقط بحدود ؟

• (alveoli filled with pus) =

1) Consolidation → as: pneumonia

2) Collapse

3) Cavity → Abscess.

2. Intensity.

Not equal / (equal) تفاوت.

(diminished intensity)

3. Added Sounds

Pleural rub

whise

Crackles

Coarse

fine

① (Whise)

→ Asthma + COPD

→ just whise - لا شيء

(OSCE)

← عالى حاد

↳ expiratory whise

↳ inspiratory . expiratory whise.

↳ inspiratory (Rare)

↳ tracheal.

(obstruction / infection)

(b) Crackles :

↳ They may be Fine , Coarse :

(1) Coarse crackles : ∞

↳ It indicate excessive fluid on the lungs ← Blood
Pus
Fluid.

↳ ~~It~~ They are usually heard at the beginning of expiration.

↳ It Caused by :

1) Aspiration

2) Pulmonary oedema.

3) Chronic heart disease

4) Chronic bronchitis

5) Pneumonia.

+ COPD

6) Bronchiectasis.

Characteristic ← ← ↓
(Inspir + expira. crackles)

2) Fine Crackles : ∞ (mid-late inspiration) (في الآخر)

↳ Predominantly they are heard in inspiration.

↳ It Caused by :-

• pulmonary fibrosis.

• Sarcoidosis

• Asbestosis

• Pulmonary edema

(c) Pleural friction rub.

↳ indicate to (Pleurisy).

↳ Rare to be heard.

(Bronchial breathing) (صوت ربيعي)

4. Vocal resonance : ∞

↳ Hyper resonance (3C) ← Collapse
← Consolidation
← cavity.
inspect vocal.

Palpation + Percussion
auscult

وبه ذلك نقرر هذه النقاط على الجذر

بعض ملاحظات خلال دوام سعال الانزوني (صوتية) :-

(1) أهم الاضطرابات التي يجب دراستها هي : Pneumonia , PE , Asthma , COPD , Pleural effusion.

:- Notes :-

1) drugs induced interstitial lung disease :-

- 1) Phenytoin 2) Methotrexate 3) Amiodarone.
- 4) Nitrofurantoin 5) Bleomycin
- 6) Busulfan 7) Penicillamine 8) Cocaine / Heroin.

2) Bacterial species isolated from Patients experiencing exacerbation of COPD are :

1) ~~Haemophilus~~ Haemophilus influenza.

- 2) Moraxella catarrhalis.
- 3) Streptococcus pneumoniae.
- + 4) less common (Staph. aureus).

3) COPD exacerbation

↳ 75% infections ↳ 25% PE

4) SS ICS + SABA + LABA من أجل في حالة
↳ In Case of Asthma-COPD interacting syndrome.

5) What the differences between :

Albuterol vs. Salbutamol		us.	Salmeterol
↓	↓		↓
(نفسه) SABA	Brand name.		LABA
	(Trade name)		

6) Indication of surgery in COPD Patient :-
as: Emphysematous

Pneumothorax.

7) Oral Prednisone equal ~~to~~ better than IV.

- 8) # Indications of long term Oxygen therapy (LTOT) :-
- 1) Chronic obstructive Pulmonary disease (COPD)
 - 2) ILD (Interstitial lung disease).
 - 3) Pulmonary Hypertension.
 - 4) Cystic fibrosis.
 - 5) Advanced cardiac failure.

9) In-hospital patients $\Rightarrow$

- DVT $\leftarrow$
- Fluid overload $\leftarrow$

lower limbs $\rightarrow$ capillary refill

10) Geographic tongue : $\rightarrow$ vitamin deficiency (B12)
 $\hookrightarrow$ Senility

11) Read about Cervical spondylosis.

12) Complication of TIPS on liver ??
Hepatic encephalopathy.

13) DDX of white lung on X-ray: Pneumonia
~~Pneumothorax~~ Collapse

14) Atypical bacterial pneumonia pleural effusion.
is caused by atypical organisms. severe (massive)

(Not detectable by Gram stain / Not cultured)
 $\hookrightarrow$ MCC are :

- ① Mycoplasma pneumoniae
- ② Chlamydia pneumoniae
- ③ Legionella pneumophila

Cavity :-

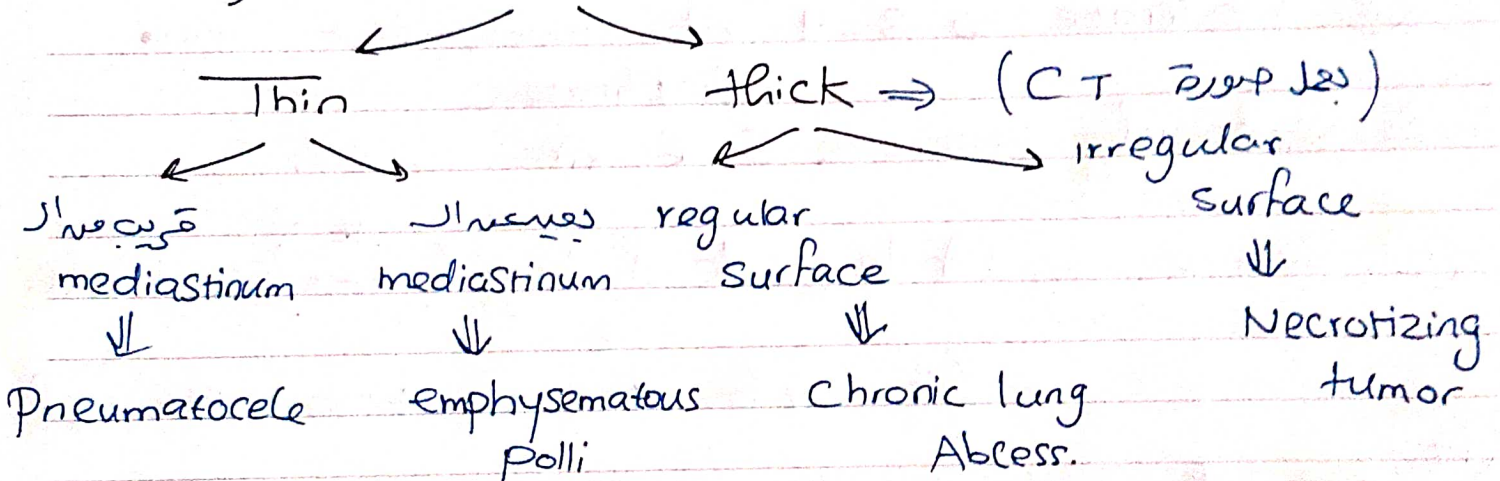
كيف اقترأ ال X-ray في حال وجود Cavity
 # ما يتبعه خلال ال CT + تميز النوع + ال DDX ؟

① Content of cavity (according the color on X-ray)

- Ⓐ Air
- Ⓑ Air-fluid mass
(الهواء السائل)
- Ⓒ soft tissue mass.

Ⓐ Air containing cavity.

1) thickness of membrane.



Ⓑ Air - fluid mass.

• Fluid - Air ال أنظر لخط الغاطس

↳ Acute lung Abscess.

↳ Straight line.

↳ Hydated cyst → may caused by parasite.
 water wavy sign.

Ⓒ soft tissue mass :-

- ↳ Fungal ball (CT) (كثيف ال CT)
(regular surface)
- ↳ necrotizing tumor (irregular surface)
- ↳ Rupture hydated cyst (تفجّر الكيسة المائية)

15) Complications of Pneumonia :-

- 1) ARDS
- 2) lung Abscesses.
- 3) Respiratory failure
- 4) sepsis.

16) ⇒ كيف يقي درجة تبخ ال effusion في ال X-ray

① mild ⇒ involved 1st + 2nd rib above diaphragm (لوا الين)

② Moderate ⇒ 3-4 ribs involvement from diaphragm

③ Moderately severe ⇒ 5-6 ribs " "

④ Severe ⇒ whole side of lung ($< R_t$) is white.

((It may be due to pneumothorax))

17) PH of Normal pleural fluid = 7.6

18) TB patient, May be diagnosed in first time by pleural effusion that according to WBCs Percent.

(Adenosine deaminase)
→ For ensuring → ΔE ADE test.

$\swarrow$ $\searrow$
 -ve +ve
 exclude TB ✓

19) D-dimer ⇒ N > 500 (< 504) in

↳ High in:

(Pregnancy & infection
liver failure & Renal failure)

في ال d-dimer ال > 504

(age x 10) = N

N = 650

∴ 500 < 650

20) Peritoneal dialysis may cause (Massive Pleural effusion)
→ progress quickly to cause acute respiratory distress...

21) different causes / types of Pleural effusion : (Transudative)
(due to :)

- 1) Peritoneal dialysis → Rt Side effusion.
- 2) CSF leak
- 3) urinothorax.

← in Renal Stones.

The only cause of low pH (acidic) transudative pleural effusion.

22) McConnell's sign :

Persistent Hypotension, defined as Rt ventricular (RV) free wall hypokinesis with preserved apical contractility.

↳ It classically indicates (PE) / ↳ some studies show that it may be seen in Acute RV infarction.

23) ECO ⇒ Baseline for all Patients. with PE.

24) Study Wells score ... ~~##~~