

HISTORY TAKING



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PULMONARY DEPARTMENT

CONFLICT OF INTEREST

- None.

* Proper history give 85 % of diagnosis...

* 2 way of history taking → yes or no question !! ❌ غير مناسبة
→ open question !! ✓



Scheme of history taking

ART [listen + respect the pt pain]

- Initial enquiry
- **Chief complaint** with pt words [ex: Shortness of breath not dyspnea]
Bloody cough not hemoptesis
- History of present illness
- Past medical history
- Systemic enquiry
- Family history
- Occupational history
- Drug history
- Social history
- Personal history

Introduction

- ✓ **Introduce yourself** – *name/role*
- ✓ **Confirm patient details** – *name/DOB*
- ✓ **Explain the need to take a history**
- ✓ **Gain consent** [*get permission*]
- ✓ **Ensure the patient is comfortable** [*position in 45° degree*]

Presenting complaint

It's important to use open questioning to elicit the patient's presenting complaint.

“So what's brought you in today?” or “Tell me about your symptoms”

Allow the patient time to answer, trying not to interrupt or direct the conversation.

Facilitate the patient to expand on their presenting complaint if required.

“Ok, so tell me more about that” “Can you explain what that pain was like?”

History of presenting complaint

analyse the pulmonary and
cardiac system...
أيما البقي في الـ ROS

Onset – When did the symptom start? / Was the onset acute or gradual?

Duration – minutes / hours / days / weeks / months / years

Severity – e.g. if the symptom is shortness of breath – are they able to talk in full sentences?

Course – is the symptom worsening, improving, or continuing to fluctuate?

Intermittent or continuous? – Is the symptom always present or does it come and go?

Precipitating factors – are there any obvious triggers for the symptom?

Relieving factors – does anything appear to improve the symptoms e.g. an inhaler

Associated features – are there other symptoms that appear associated e.g. fever/malaise

Previous episodes – has the patient experienced this symptom previously?

Key respiratory symptoms:

- **Dyspnoea** – Only on exertion or at rest? / Determine severity
- **Cough** – Dry vs productive / Sputum (volume, colour, consistency)
- **Wheeze** – Time of day / Triggers
- **Haemoptysis** – Volume
- **Chest pain** – Site / Radiation / Character ✓
- **Systemic symptoms** – Fever / Night sweats / Weight loss

If any of these symptoms are present, gather further details as shown above (Onset / Duration / Course / Severity / Precipitating factors / Relieving factors / Associated features / Previous episodes)

- Symptoms

- Cough ✓
- Sputum production ✓
- breathlessness ✓
- Chest Pain ✓
- Hemoptysis ✓
- Wheeze / Stridor ✓

* Congestive HF

- Paroxysmal nocturnal sweat..
- dyspnea
- LL edema (Both)

- Cough [Blood]
 - dry [not productive]
 - wet [productive]
- flu like symptoms
- breath difficulty
- Chest wheeze [symptom + sign]
- short of breath
- night sweat شبی تب
- Fever
- weight loss / loss of appetite
- hoarseness of voice
- LL swollen [in PE due to DVT]
- heaviness مثل بلاغ کالس
- chest pain
- loud snoring خمار
- sleepiness...

→ ONSET / DURATION :-

Acute cough (<3 wks)

- Upper respiratory tract infections ✓
- Pneumonia ✓ infection.. [Chronic - مزمنة يعني لها - Chronic] (له مثل كذا فترة يعني لها - Chronic)
- Pulmonary embolism ✓ due to MI
- Congestive Cardiac Failure ✓

- Seasonal cough
- Practesis
- allergic or drug induce [ACE inhibitor]
- Inflammatory

لما له وقت بعد الاكثير يعني Chronic problem ...

الحكة بشكل عتاني حاد
وقت محدود...
[infectious cough]

Subacute cough (3- 8 weeks)

- Viral infections ✓
- Post infective ✓
- Post nasal drip ✓
- GERD ✓

Chronic cough >8 wks

- Pulmonary Tuberculosis ✓
- Bronchial Asthma ✓
- COPD → smoker or Bio massive fuel exposure أو تلوث الهواء or noxious gases ...
- Bronchogenic carcinoma ✓
- Eosinophilic bronchitis ✓
- Post nasal drip ✓
- GERD ✓
- Drugs like ACE inhibitors ✓
- Congestive cardiac failure ✓

* COPD :- 1- smoker or noxious gases exposure...
2- chronic productive cough.
3- in spirometry test $< 70\%$...

$\frac{\text{Force of exp. volume in 1st sec}}{\text{Force of vital capacity}}$ ←

Sputum

- Consistency ✓
- Amount ✓
- Color ✓
- Postural variation ✓
- Smell ✓

The Constitutional Symptoms very important:-

- 1- fever...
 - 2- weight loss ...
 - 3- night sweat...
 - 4- anorexia...
 - 5- recent Travel Endemic area]...
- ↳ TB- Covid 19..
- B symptom...

Consistency

- Serous - Upper Respiratory tract Infection, Bronchoalveolar carcinoma
- Muroid - Chronic bronchitis, Bronchial Asthma
- Mucopurulent - Bacterial infection

Amount

Copious Amount [large amount]

- Bronchiectasis
- Lung Abscess
- Necrotizing pneumonia ✓
- Alveolar cell carcinoma ✓
- Empyema rupturing into bronchus ✓

بجائیں کبیر } →

(Bronchorrhoea - >100ml sputum/day)

Color of sputum

- Yellow / Green — Bacterial infection
- Black — coal worker pneumoconiosis
- Pink frothy sputum — Pulmonary edema
- Rusty sputum — pneumococcal pneumonia [strepto] → mccc.. مثل الصدأ
- Red currant jelly sputum — klebsiella
- Blood tinged / streaking of sputum- tuberculosis
- Anchovy sauce — Ruptured amoebic liver abscess.

* The amount of hemoptesis very important to narrowing the differential diagnosis and the ...

لے جی ار approximation
بین نالہ قد کاستہ ار اقل... etc.

severe - moderate - mild ← hemoptesis

systemic involvement (hemodynamic instability - Hypotension - Hb drop) massive.

* Causes of hemoptesis: - TB - PE - vascular disorder - infection [pneumonia] - pathet - (HF)

→ BV congestion → pulmonary congestion → hydrostatic P → mobilization of RBCs
→ The MCC is acute bronchitis...

pink color
frothy secretion
Typical for pulmonary edema

* hemoptesis → mild < 100 mL/day [not alarming]
→ moderate [100 - 400 mL/day]..
→ massive > 400 mL/day need ICU admission + Blood transfusion.

→ occur if there is systemic problem [shock - hypotension]

The dead space of hemoptesis in any pt → 150 mL → [100 mL/hour considered massive]...
→ no gas exchange in the conductive system in the resp. T. - from nose to the terminal bronchioles...

* hemoptesis + LL edema + chest pain → PE...

* ✓ pink color + bilateral LL swollen + orthopnea → HF..

* smoker + cough → cancer or chronic Bronchitis or COPD...

* Trachea has 23 division...

→ in the R lung there is 3 lobe - 10 segment...

→ in the L lung there is 2 lobe - 8 segment...

* wheeze analysis:-

- onset...
- course...
- duration...
- relieving symptom...
- associated symptom...
- Time
 - ↳ at morning...
 - ↳ at night :- asthma - pulmonary edema - HF...

when we Auscult it [unilateral - bilateral - localized - diffuse]

The lower limb swollen:- bilateral or unilateral...

- liver failure - renal failure - HF
protein losing enteropathy.

↳ DVT - PE - lymphedema..

* B Symptom +ve in:-

- 1- lymphoma..
- 2- Brochogenic Cancer..
- 3- infection [T.B]..

* Stridor:- not symptom...
↳ it's sign...

Dyspnea

“Subjective experience of breathing discomfort that consists of qualitatively distinct sensations that vary in intensity. The experience derives from interactions among multiple physiological, psychological, social, and environmental factors that may induce secondary physiological and behavioural responses.”

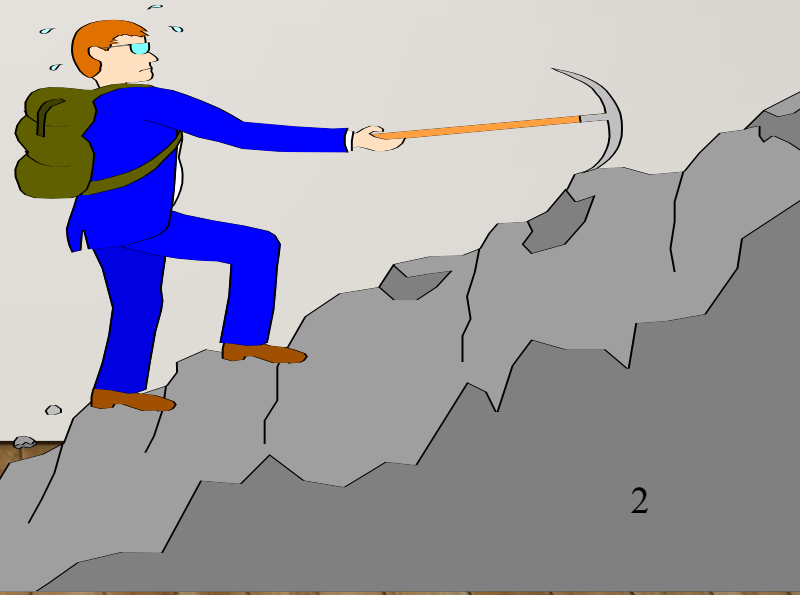
(The American Thoracic Society)

*sudden or acute in the PE - HF - pneumothorax..

- 2^o Onset ✓
- Duration ✓
- Severity ✓
- Aggravating and relieving factors ✓
- Postural variation ✓
- Diurnal variation ✓
[Time]
→ exceptional or not [at rest or with activity]

DEFINITION

- Dyspnea: unpleasant, subjective sensation of abnormal respiration.
- Labored breathing - physical presentation of respiratory distress/
dyspnea
- Many causes



DYSPNEA MAY BE **ACUTE** (WITHIN MINUTES), **RAPID** (WITHIN HOURS/DAYS), **GRADUAL** (WITHIN HOURS/DAYS/MONTHS) OR **SLOW** (WITHIN MONTHS/YEARS):

- **Acute**: Pneumothorax, asthma, pulmonary edema, and PE embolism, laryngeal edema and foreign body inhalation.
- **Rapid**: Hemothorax, pneumonia and acute bronchitis.
- **Gradual**: Pleural effusion, ILD, chronic bronchitis, tuberculosis and bronchial carcinoma.
- **Slow**: Emphysema, pneumoconiosis and sarcoidosis.

DYSPNEA

- How short of breath is the patient?

Grade

- When does it comes?

Exertional/ Rest

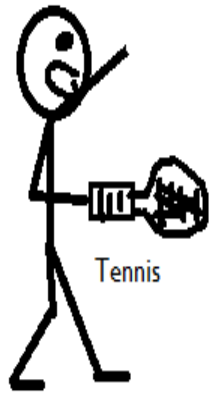
- Does it comes in attack?

Paroxysmal

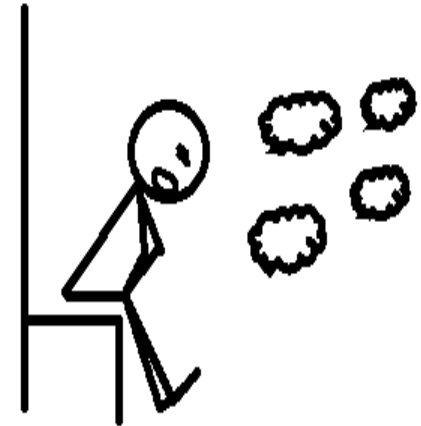
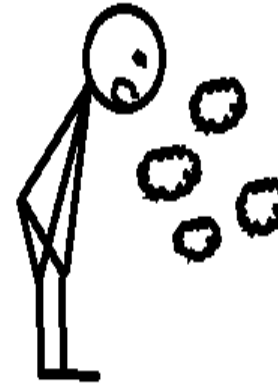
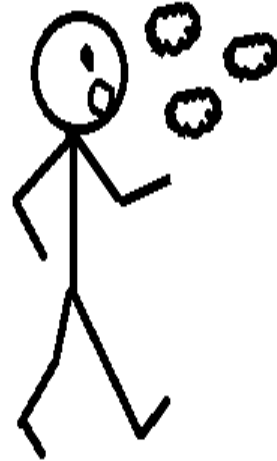
- Does he have attacks of breathlessness at night?

- Does he have to sit up or can he sleep lying down? **Orthopnea**

MRC BREATHLESSNESS SCALE



Tennis



MMRC Dyspnea Scale

Grade 0

Not troubled by dyspnea
unless on strenuous exercise

Grade 1

Dyspnea when hurrying
or walking up hill

Grade 2

Dyspnea when walking on
level (slower/stop for breath
after 15 minutes)

Grade 3

Severe dyspnea when walking
on level (need to stop after
100 m/a few minutes)

Grade 4

Very severe dyspnea till cannot
leave the house

→ we do NEHA score:-

- grade 4:- dyspnea with rest...
- grade 3:- " " with walking [slow]
- grade 2:- " " 2nd field
- grade 1:- " " external exercise

Modified Medical Research Council (MMRC) dyspnea scale

Grade	Description of breathlessness
0	I only get breathless with strenuous exercise
1	I get short of breath when hurrying on level ground or walking up a slight hill
2	On level ground, I walk slower than people of the same age because of breathlessness, or have to stop for breath when walking at my own pace
3	I stop for breath after walking about 100 yards or after a few minutes on level ground
4	I am too breathless to leave the house or I am breathless when dressing

- Aggravating factors
 - Exposure to allergen
 - Exercise
 - Drugs
 - Cold weather
- Relieving factors
 - Medication
 - Rest
 - Removal of allergen

Diurnal and postural variation

- Bronchial asthma
- Lung abscess
- Bronchiectasis

DYSPNEA

- **Exertional**
 - Mild, moderate or severe.
- **Paroxysmal**
 - Cardiac / bronchial asthma
 - Others?(e.g. Carcinoid, Uremic asthma)
- **Orthopnea** (advanced CHF, COPD or asthma- massive ascites, late months of pregnancy)
- **At rest**

PAROXYSMAL DYSPNEA

→ **PRD** :- **dyspnea** بترجيع عن ريفك

→ **HF** :- **dyspnea** وما يقف راح يتحسن [يصعب بعد ساعة أو ساعتين من النوم] associated with ^{LL Swollen} orthopnea

→ **asthma** :- **dyspnea** من فترة فترتين متلاعبة في **in young and has history of Atopy and allergy...**

peak of asthma [حاجتنا القوية] [dueto ↑ vagal tone - ↑ Cortisone ... etc]

- BA **فقط يحتاج بال inhaler**
- Cardiac asthma
- Recurrent PE
- EAA (HP)
- Carcinoid syndrome
- Recurrent laryngeal obstruction by oedema or polyp
- Psychogenic
- GERD

ORTHOPNEA: dyspnea when lying down...

لَمَنَّاكَ الْبَرِيضُ بِحَمِّ حَزَّةٍ بَيْنَا
لَمَّا كَانَ أَقْلُ حَمِّ فِي طَائِفِ
orthopnea
orthopnea...
• وَتَلَهُ لَمَّا تَزَحَّفُ فِي رِجْلَيْهِ عِنْدَهُ

Dyspnea on recumbency, which is partially relieved on sitting up. It is a common symptom of ^①left sided heart failure. ^{MCC}Sitting up relieves the condition because:

- Increase in the intra-abdominal pressure improves diaphragmatic contraction.
- Decrease in venous return relieves lung congestion.
- Better ability to use accessory muscles of respiration.

The causes of orthopnea:-

- 1- HF → pulmonary edema...
- 2- bilateral diaphragmatic paralysis...
- 3- obstruction [huge retrosternal goiter]
- 4- bilateral pleural effusion...
- 5- late pregnancy...
- 6- massive Ascitis..

D.D. OF ORTHOPNEA:

- Massive ascites. ✓
- Retrosternal goiter. ✓
- Bilateral basal bronchiectasis (positional increase of expectoration). ✓
- Bilateral paralysis of the diaphragm. ✓
- Late months of pregnancy. ✓

PLATYPNEA

عكس ال
orthopnea...

Dyspnea on standing or sitting relieved by lying down

- Rt to Lt cardiac shunt- AV malformation- Recurrent PE- Post pneumonectomy [hepatopulmonary syndrome]..

TREPOPNEA *in one side*

Dyspnea on lying on the affected side relieved by lying on the healthy side

- **PI effusion**- Suppurative lung disease- Chest wall tenderness
massive

APHORISM *in Children...*

- Coughing till you vomit is bronchospasm till proven otherwise. Consider cardiac *Bronchospasm...*
- Vomiting AND THEN coughing -> think aspiration

* The continuous coughing → ↑ intra abdominal pressure → vomiting...

DIFFERENTIAL DIAGNOSIS FOR SOB

Most Common

- Obstructive: Asthma, COPD
- Congestive heart failure
- Ischemic heart disease
- Pneumonia
- Psychogenic: Panic, anxiety

Urgently Life Threatening

- Upper airway obstruction
 - Foreign body
 - Angioedema/anaphylaxis
- Tension pneumothorax
- Pulmonary embolism
- Neuromuscular weakness
 - Myasthenia gravis
 - Guillain-Barre

CHEST PAIN * angina

heavens ones qbl
diffuse [cardiac cause]

associated with sweating - nausea
radiated to the

* localized chest pain not cardiac cause
ex:- pleuritic chest pain...

right arm
lower jaw
neck
back

...MI x 60 j

* in pleurisy the pt has chest pain with deep breath...

↳ pain during inspiration...

may be due to:- pneumonia - PE due to lung infarction...

→ R+ pleuritic chest pain → chest pain - localized increased by deep breathing...

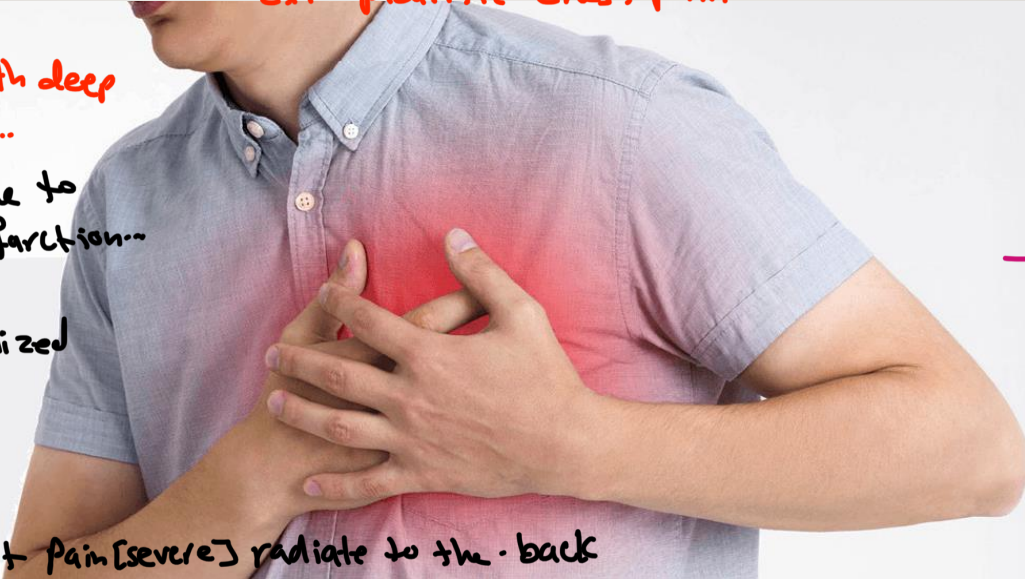
Angina	MI
the pain less than 20 min..	the pain more than 30 min.

* In Aortic dissection there is:- Tearing chest pain [severe] radiate to the back
aneurysm ← ... كاتر ...

* The esophageal spasm lead to
* " " reflux
* The Myocardial infarction
* The Aortic dissection

retrosternal [central] chest pain:-

* pleuritic chest pain } peripheral chest pain...
* PE



PE
MJ > (fatal) dangerous causes differential diagnosis chest pain
pneumo thorax

Pain – if pain is a symptom, clarify the details of the pain using **SOCRATES**

- **Site** – where is the pain
- **Onset** – when did it start? / sudden vs gradual?
- **Character** – sharp / dull ache / burning

Radiation – does the pain move anywhere else?

- **Associations** – other symptoms associated with the pain
↳ chest pain + nausea + sweating [very alarming]...
- **Time course** – worsening / improving / fluctuating / time of day dependent
- **Exacerbating / Relieving factors** – does anything make the pain worse or better?
- **Severity** – on a scale of 0-10, how severe is the pain?

* if the chest pain come with moving it's mean musculoskeletal cause...
عند تحريكه عظام...

HISTORY ?????..

- SITE
- ONSET
- CHARACTER
- SEVERITY
- DURATION
- RADIATION
- AGGRAVATING FACTOR
- RELIEVING FACTORS
- ASSOCIATED SYMPTOM



History of presenting complaint

Gain further details about the chest pain using **SOCRATES**

Site – *where is the pain (e.g. central chest)*

Onset:

- Duration of pain (important when considering angina vs acute coronary syndrome)
- Did it come on suddenly or has it been gradually building?
- What was the patient doing at the time of onset? (exertional / at rest)

Character:

- Aching/crushing – *typical of acute coronary syndrome (ACS)*
- Sharp pain that's worse on inspiration (pleuritic) – *pulmonary embolus/pneumothorax*

Radiation:

- Does the pain move anywhere else?
- Left arm and jaw is typical of ACS
- Radiation through to the back is associated with aortic dissection

Associated symptoms:

- **Dyspnoea** – *exertional? / orthopnea? / paroxysmal nocturnal dyspnoea?*
- **Sweating / clamminess / nausea** – *associated with ACS*
- **Cough** – *duration? / productive of sputum? (pneumonia) / haemoptysis? (PE)*
- **Palpitations** – *ask patient to tap out the rhythm*
- **Syncope / dizziness** – *postural? / exertional? / random?*
- **Oedema** – *peripheral oedema (e.g. lower limbs)*
- **Fever** – *pericarditis / costochondritis / pneumonia*

Time course:

- Duration – *minutes / hours / days / weeks*
- Worsening / improving / fluctuating

Exacerbating/relieving factors:

- Does anything make the pain worse?
 - *Inspiration (PE / pneumothorax / pneumonia)*
 - *Exertion (ACS / PE / pneumothorax / pneumonia)*
 - *Lying flat (pericarditis)*
- Does anything make the pain better?
 - *GTN spray (ACS or oesophageal spasm)*
 - *Leaning forward (pericarditis)*

Severity – *on a scale of 0-10 how severe is the pain?*

RETROSTERNAL ✓

- **CARDIAC**-ANGINA, MI, MYOCARDITIS, PERICARDITIS, MVP
- **MEDIASTINAL**-TRACHEITIS, MALIGNANCY
- **AORTIC**-DISSECTION, ANEURYSM
- **ESOPHAGEAL**-ESOPHAGITIS, SPASM, MALLORY WEISS SYNDROME
- **ANXIETY/EMOTION**

PERIPHERAL ✓

- LUNG/PLEURAL-PNEUMOTHORAX,INFARCT.
- MALIGNANCY
- MUSCULOSKELETAL-RIB#,MUSCLE INJURY,OSTEOARTHRITIS,OSTEOCHONDROITIS
- BREAST DISORDERS
- NEURALGIC-IVDP,HERPES
- ANXIETY

ONSET

- **SUDDEN**
RETROSTERNAL-
MI, PNEUMOTHORAX, PULM.
EMBOLISM, ESOPHAG. RUPTURE
PERIPHERAL- PNEUMOTHORAX, PE
- **GRADUALLY ON EXERTION-ANGINA**
- **AFTER VOMITING-ESOPHAGEAL RUPTURE**
- **CONSTANT-**
PERICARDITIS, MUSCULOSKELETAL, GI

OCCURRING WHEN ?DURATION?

- ON **EXERTION**-CARDIAC PAIN
- ON **FOOD INTAKE**-ESOPHAGEAL
- ANGINA <20min
- MI >30min

CHARACTER & SEVERITY

- **CONSTRICTING-**
CARDIAC, ESOPHAGEAL SPASM
- **STABBING-** PLEURAL, MUSC. SK



- **Symptoms**
- Cough
- Sputum production
- breathlessness
- Chest Pain
- Hemoptysis
- Wheeze / Stridor

Scheme of history taking

- Initial enquiry
- Chief complaint
- History of present illness
- Past medical history
- Systemic enquiry
- Family history
- Occupational history
- Drug history
- Social history
- Personal history

Past medical history

DM - HTN - COPD - asthma...etc

Respiratory conditions – *asthma / pneumonia / COPD / pulmonary embolism / malignancy / tuberculosis*

* history of similar attacks...

Other medical co-morbidities – *cardiovascular disease / neuromuscular disease / malignancy*

Surgical history → *lobectomy - lung biopsy ...etc*

Acute hospital admissions / ^{intubation.} ITU admissions?
previous ICU admission } → red flag [alarming]

Drug history

+ allergy سبب
+ vaccination...

Regular medications – often provide useful clues as to patients past medical history

- Inhalers – preventer / reliever [salbutamol]
- Steroids
- Diuretics

سبب **Antibiotics** ACE inhibitor - β -blocker - NSAIDs [oral]...
cough سعال ← asthma سعال ←

Over the counter drugs / herbal remedies?

↳ OTC

Home **oxygen?**

↳ it is a drug...

* pt take OCB come with sharp pleuritic chest pain → PE...

Medications with respiratory side effects:

- Beta-Blockers / NSAIDs – *bronchoconstriction*
- ACE inhibitors – *dry cough*
- Cytotoxic agents – *interstitial lung disease*
- Oestrogen – e.g. contraceptive pill / HRT – *increased risk of PE*
- ① Amiodarone / ② Methotrexate – pleural effusions / interstitial lung disease
+ ③ nitrophenitron + ④ leumycin
[antibiotic] [chemotherapy].. *lead to lung fibrosis*

ALLERGIES – document these clearly

* pituitary adenoma pt take cabergoline for 9 years with coughing + dyspnea → diagnosed by lung fibrosis due to cabergoline
فلا تتركه يوقف الدواء
He lost his lung

Family history

Respiratory disease? – asthma / atopy / lung cancer / cystic fibrosis / emphysema
[α₁ antitrypsin]
...[mucus secretion] Na⁺/Cl⁻ channel
genetic disease..
autosomal recessive in Ch 7
Bronchiectasis

Recent contact with others who were unwell? – viral infections / pneumonia / TB

* Kartagener syndrome:-
- Situs inversus... [dextrocardium]
- Chronic sinusitis...
- bronchiectasis...

* infertility + bronchiectasis → young syndrome...

Social history *Bad habits:-*

✓ **Smoking** – *عدد السجائر في اليوم* – How many cigarettes a day? How long have they smoked for?

✓ **Alcohol** – How many units a week? – be specific about type / volume / strength of alcohol

✓ **Recreational drug use** – e.g. Cannabis (increased risk of lung cancer)

✓ **Living situation:** *ventilated house or not..*

- House / Flat – stairs / adaptations / home oxygen
- Who lives with the patient? – important when considering discharge from hospital
- Any carer input? – what level of care do they receive?

✓ **Activities of daily living:**

- Is the patient independent / able to fully care for themselves?
- Can they manage self-hygiene/housework/food shopping?

Occupation: very important in resp. problem...

- ^{في المرفأ} Shipyard / Construction / ^{سبالة} Plumber – Asbestos
- ^{في المناجم} Miners – Pneumoconiosis
- ^{ساعه} Farmer – Allergic extrinsic alveolitis [hyper sensitivity pneumonitis].
 - ↳ allergic- lung fibrosis
 - acute
 - subacute
 - chronic
↓
irreversible !! [the pt lost his lung]

Hobbies – Bird fancier – *Allergic extrinsic alveolitis*

* History of Animal contact is very important...

Travel history

High-risk areas for tuberculosis (TB)?

Recent long-haul flights? – *pulmonary embolism*

Systemic enquiry ROS

Systemic enquiry involves performing a brief screen for symptoms in other body systems.

This may pick up on symptoms the patient failed to mention in the presenting complaint.

Some of these symptoms may be relevant to the diagnosis (e.g. calf pain in pulmonary embolism).

Choosing which symptoms to ask about depends on the presenting complaint and your level of experience.

in API

Cardiovascular – Chest pain / Palpitations / Dyspnoea / Syncope / Orthopnoea / Peripheral oedema

Respiratory – Dyspnoea / Cough / Sputum / Wheeze / Haemoptysis / Chest pain

✓ **GI** – Appetite / Nausea / Vomiting / Indigestion / Dysphagia / Weight loss / Abdominal pain / Bowel habit

✓ **Urinary** – Volume of urine passed / Frequency / Dysuria / Urgency / Incontinence

✓ **CNS** – Vision / Headache / Motor or sensory disturbance / Loss of consciousness / Confusion

✓ **Musculoskeletal** – Bone and joint pain / Muscular pain

✓ **Dermatology** – Rashes / Skin breaks / Ulcers / Lesions

Closing the consultation

Thank patient ✓

Summarise the history ✓

THANK
YOU

Done ☒ 😊

