2012

Internal Medicine Focused History

MEDICAL SCHOOL COMMITTEE

Hashemite University

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Monoarticular arthritis

History:-

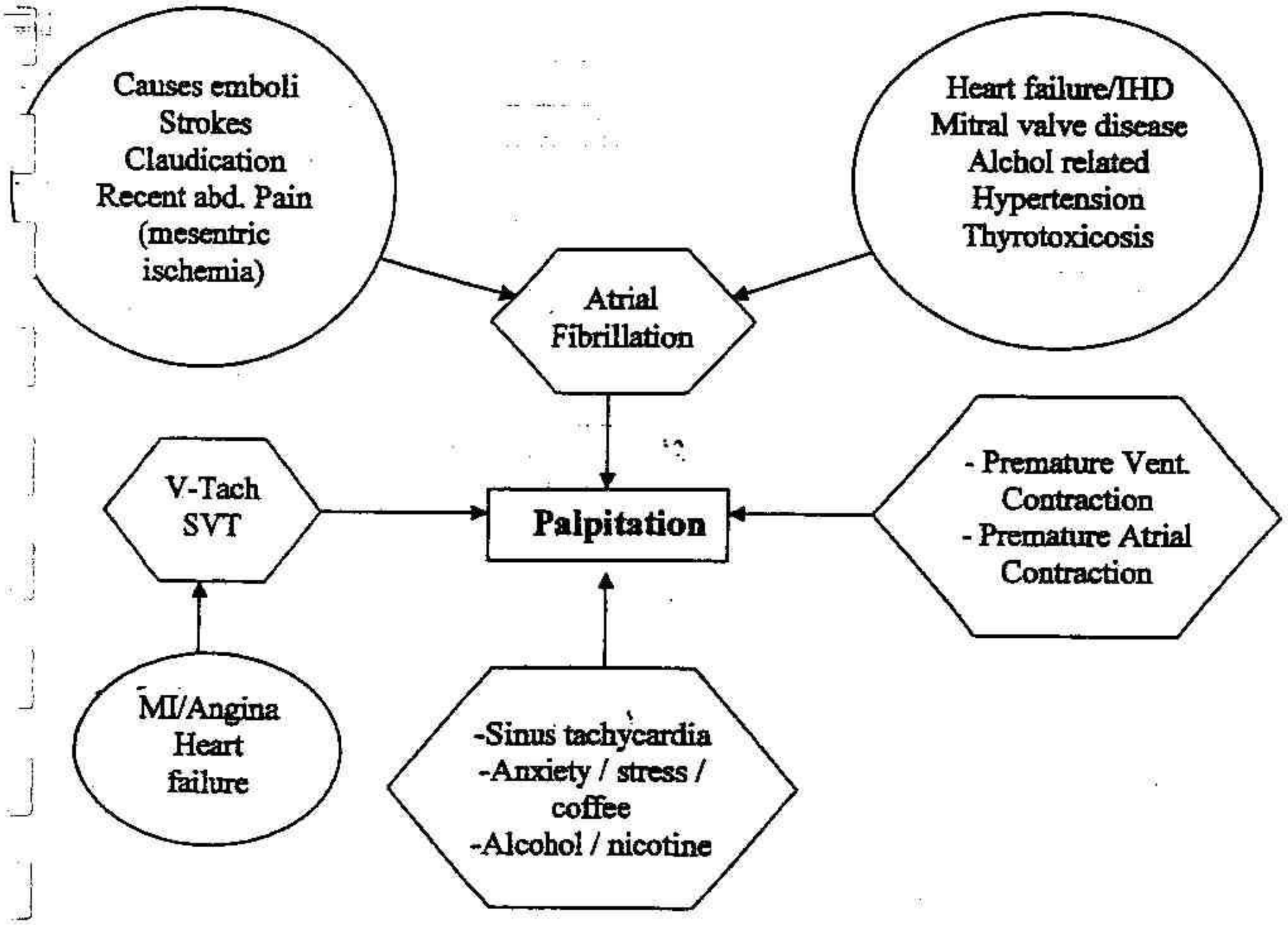
- **Age**
- **Male or female**
- **Which joint (location)**
- **Pain in any other joint, back**
- **Swelling**
- **Hotness**
- **Pain on movement (osteoarthritis)**
- **Pain relieved by movement**
- **Morning or night pain**
- **Morning stiffness + duration**
- **Skin rashes**
- **Eye involvement, any infection**
- **Past infections of UGS, GIT or RS ... (Reiter's syndrome)**
- **Nodules**
- **Spinal movement difficulty ... (Ankylosing Spondylitis)**
- **Fever**
- **Weight loss**
- **Family history ... (Spondyloarthropathies, arthritis, psoriatic)**
- **Changes of hands and/or fingers ... (Sausage digits)**
- **Plantar region pain**
- **Chest pain ... (Ankylosing Spondylitis + FMF)**
- **Tongue lesions ... (Reiter's syndrome)**
- **Nail changes {Pitting, dystrophy} ... (Reiter's syndrome + Psoriasis)**
- **GI symptoms ... (Enteropathic Spondyloarthropathies + FMF)**
- **Oral {Painful} or genital ulcers ... (Behçet's disease)**
- **Renal manifestations, hematuria ... (Behçet's disease)**
- **Hemoptysis, SOB ... (Behçet's disease)**
- **Sacroiliitis ... (Behçet's disease, Spondyloarthropathies)**
- **Back pain - Cervical ... Rheumatoid arthritis**
  - Lumbar/Sacral ... Psoriatic + osteoarthritis
- **Increase uptake of meat, liver, kidneys ... (Gout)**
- **Crohn's / UC**
- **Drugs .... DMARDS**

Differential diagnosis:-

- **Trauma**
- **Rheumatoid arthritis**
- **Reiter's syndrome**
- **Ankylosing Spondylitis**
- **Gout**
- **Pseudogout**
- **Osteoarthritis**
- **Behçet's Disease**

Palpitation

- When do you have palpitation
- What triggers it?? Exercise or you only hear it when everything is quiet?
- What terminates it? Relieving factors (breath holding, exercise, position)
- Frequency
- Duration, for how long?
- When did the current attack begin?
- Rhythm (make the patient tap it)
- Are you a smoker/ do you drink alcohol / drink coffee
- Are you stressed lately / anxiety?! panic recent infection
- Are you taking any drugs / B agonist cause palpitation
- Do you feel pale lately /dizzy /weak/ are you anemic/ any history of blood disorders
- Do you feel hot/sweaty/any tremors/enlarged mass on the neck
- Are you a hypertensive
- History of IHD / heart failure
- For HF { we can ask about abdominal destination or leg swelling, or how many pillows he sleeps on.
  Any dyspnea or orthopnea
- For IHD { any history of recent chest pain/dyspnea/dizziness/vomiting}
- Any history of syncope (loosing consciousness) a sign of arrythmias
- Any history of heart problems (valve replacement)
- Any history of family premature heart disease or sudden death



Cough

- **Personal history: age, race and occupation**
- **When did it start? (Acute or chronic)**
- **How did it start? (Gradual or sudden)**
- **Is it productive or dry cough?**
- **What was it's character?**

Description of cough	Possible cause
Dry, hacking	Viral infections, interstitial lung disease, tumor, allergies, anxiety
Chronic, productive	Bronchiectasis, chronic bronchitis, abscess, bacterial pneumonia, tuberculosis
Wheezing	Asthma, COPD, bronchospasm, CHF
Barking "harsh"	Epiglottal diseases including acute epiglotitis, laryngeal inflammation usually associated with stridor
Loud, brassy	Pressure on trachea. Eg. Tumor
Feeble non-explosive "bovine"	Lung CA involving left laryngeal nerve with paralysis of left vocal cord
Morning	Smoking
Nocturnal	Asthma, postnasal drip, CHF

- **Time of cough**
  - ✓ **Nocturnal causing sleep disturbance:- suggestive of asthma.**
  - ✓ **Early morning with sputum is common in smoker and suggestive of chronic bronchitis.**
  - ✓ **Daytime cough occur with occult GERD & chronic sinus disease with postnasal drip.**
- **Severity: - is it so severe that cause syncope? If yes this indicates sever obstruction (asthma, COPD). Does the severity increased or decreased?**
- **Any relieving factors? Drugs, tea, herbs?**
- **Aggravating factors? Drugs (ACE-I), dust, fumes, poliens or other allergens**
- **Associated symptoms:**
  - ✓ **Fever:- indicates infection**
  - ✓ **Weight loss:- malignancy**
  - ✓ **Sleep disturbance:- asthma, left ventricular failure**
  - ✓ **PND, Orthopnea:- left ventricular failure**
  - ✓ **Sputum:- if present don't forget to ask about:**
    - o **Amount: - Large, purulent affected by posture →bronchiectasis**
      - Sudden large purulent amount → ruptured abscess
      - Large amount, watery, pinkish in acutely breathless Patient indicates PE
      - Large watery amount for long duration (weeks) Suggest alveolar cell cancer
    - o **Color: - Clear (Mucoid) → COPD without infection**
      - Green (Purulent) → COPD with infection, bronchiectasis
      - Yellow → acute respiratory tract infection, asthma
      - Rusty red → pneumococcal infection (red hepatization phase)
    - o **Smell: foul smell indicates anaerobic bacterial infection**
    - o **Solid material: foreign bodies, food, teeth. In asthma and asparagillosis there is a mucus plug.**
  - ✓ **Hemoptysis: TB, Lung CA, lung abscess, bronchiectasis, PE, pulmonary infarction, inhaled foreign body, trauma, bleeding**

- ✓ **Chest pain: PE, pneumonia, pleuritis, GERD, malignant lung tumor infiltrate the chest wall. Any other lung infection**
- ✓ **Breathlessness (dyspnea): severe asthma, COPD, pneumonia, pulmonary infarction, PE, left ventricular failure, lung cancer.**
- ✓ **Night sweat that wet the cloths → TB**
- ✓ **Heart burn, water brush, sleep disturbance → reflux (GERD)**
- ✓ **Skin rash (Eczema) → asthma**

- **Past history:- Previous history of respiratory problems, cardiac, GI, allergic rhinitis, asthma, eczema especially at spring and autumn seasons.**
- **Drugs: any drug suggestive of respiratory problems as inhalers taken hypertensive drugs (ACE-I, B-Blockers) can cause cough.**
- **Allergy: history of allergy to any allergens.**
- **Family: positive history of asthma, eczema, allergic rhinitis, any recent respiratory infections in the family.**
- **Social history: smoking, animals contact, surrounding factory produce pollens & allergen. The ventilation at the house. Travel history to area endemic in TB or other respiratory infection.**
- **Occupational history: ship-yard, asbestosis, passive smoker (coffee shop!!!).**

- **P/E: easy!! Just do full respiratory examination without bothering yourself alot of thinking what is related to cough or not.**

Bleeding disorder

*** History**

- Name (for communication and to know the sex!! 4 DDx) age: occupation:
- Where? Deep(usually present with joint pain hemearthrosis in coagulation factors deft) vs. Superficial (gum, petechiae and ecchymosed platelet)
- When? Immediately after injury (platelet) or delayed (C.factors)
- Is it the first time? Have one of your teeth extracted or have you undergone major surgery? If yes outta significant bleeding u can role out Inherited disorders?! Fmily Hx of bleeding disorders?
- Do you have any Chronic illnesses? The answer points you to ask abt drugs Hx (Aspirin & WARFARIN in IFID& DVT), Cancers (cytotoxic drugs & DIC as complication of Ca !!)
- Pallor palpitation recurrent infxi (pan Hematological prob), generalized lymphadenopathy & Wt loss night sweat (Ca)
- Have you noticed any yellowish discoloration of the sciera? Chronic alcoholism Or any other liver problems?
- Do u've any Ch renal diseases? Uremia causes platelets Dysfunction. (count is NRL) Fever, oliguria altered mental status (TTP HUS), abdominal pain & arthralgia (HSP its vasculitis rather than true bleeding)
- Antibiotics abuse (Vit K dif), Quinidine & heparin (ITP)
- Female ask about pregnancy

*** Investigations**

For coagulation inhibitors like lupus, D-Dimer, *ECBC, PTTPT, TT,* mixing stud ROLE OUT DIC DVT if -ve.
Ristocetin test —van wilbrand Ds.

Lymph node enlargement

*** History:**

- Name (for communication and to know the sex!! 4 DDx) age: occupation:
- Where? Generalized or localized (cervical infectious mononucleosis or URTI —sore throat- or Dental problem)
- If localized to axillary En (inquire about breast lumb & family Hx of Breast Ca) Since when? Have you touched, how is it? Craggy rubbery (sign and symptom) Do u have any known Ds? E,g, Epilepsy (phenytoin)
- Do you've fever (inquire abt grade, diurnal variation, and chills or rigor point toward infectious causes), Night sweat and weight loss (how much & how was ur appetite & do u follow diet?)
- Recurrent infxn sexual Hx, IV drug abuse? HIV
- Cough hemoptysis, skin rash, hoarseness of voice,(lung Ca-have you ever smoked-, sarcoidosis & TB-contact, previous TB
- Drugs (steroid leads to fungal infxn), phenytoin pseudolymphoma
- Genital ulcer (syphilis & chancroid), travel Hx (Ificns)
- Pets (cat scratch Ds) joint pain stiffness & skin rash (CTDs)
- Bloody diarrhea & alternating bowel habit (colon Ca)

*** INVESTIGATIONS:**

CBC monospot test IM
CXR Sarcoidosis, TB lymphoma & Ca,
Early morning sputum culture.
PFT, Calcium (sarcoidosis)
Mammogram, PPD, HIV titer, RPR & VDR1 ,Golden Standard is biopsy.

Epigastric Pain

*** History**

- Time? Progression, chronicity, relation to food (2-3 Hs after food DU, aggravated by food- Gastric Ulcer?!?, relieved by antacid, PPi & H2b)
- Influence, spicy foods, coffine, NSAIDs, steroid Alcohol
- Do you Have Nausea, vomiting, heart burn, water brush, dysphagia, reflex mouth ulcers and diarrhea? Peptic Ulcer diagnosed by Endoscope, Hx of contact with PU (H.pylori?!?)
- Abdominal pain? Analysis, fever malaise, jaundice.
premorbid conditions narrow ur DDx.
- Wt loss melena or hematemesis & early satiety, Family Hx of stomach Ca, Do you have chest pain, cough S.OB. ? have you ever smoked?,
- WHEN LAST TIME U HAD THE PERIOD? Pregnancy?
- DM (gastroparesis) , RENAL & PARATHYROID Ds. Electrolyte disturbances?. Drug Hx — v.important? You know the list, Don't you?

Leg swelling

* History

- **Name, age, gender??**
- **Duration**
- **Site of swelling? Is it both legs?**

If Unilateral ...

- **Redness, pain, hot to touch, dependent edema?**
- **S.O.B, chest pain, hemoptysis?**
- **Recent surgery, pregnancy, contraceptive pills?**
- **Limb fracture, long plan flights or travels?**
- **Previous same illness?**
- **Varicose veins, MI, Stints, HF?**
- **Fever, night sweats, involuntary weight loss? (risk for DVT)**
- **Morning stiffness, joint pain, skin nodules, deformities?**

If Bilateral ...

- **Fatigue, jaundice, abdominal distention?**
- **S.O.B, PNDs, Orthopnia?**
- **Nocturia?**
- **Recent MI, arrhythmia, incompliance to medication?**
- **Poor controlled diet, B-blocker, NSAIDs, recent bleeding?**
- **Change in urine output, edema in the face?**
- **Change in urine color?**
- **Weight gain despite poor appetite, cold intolerance?**
- **Periorbital edema, hoarseness, dry skin, constipation, poor memory?**

Investigations:- Duplex Doppler, D-dimmers, CXR, ECG, LFT, KFT, T3, T4, TSH.

Differential diagnosis:-

Local:

(Acute)
- **DVT**
- **Cellulites**
- **Allergy**
- **Ruptured backer cyst**
- **Trauma**
- **RA**

(Chronic)
- **Pregnancy**
- **Lymph edema**
- **Varicose veins**

General:
- **Heart failure**
- **Hypoproteinemia (liver failure, nephritic renal failure)**

Weight gain

*** History**

- **How much weight?**
- **Duration?**
- **Is it localized or generalized?**
- **Have you done exercise to increase muscle mass,**
- **Dietary habit**

A diet high in simple carbohydrates, Frequency of eating. Slow metabolism

- **Life style and occupation**
- **Any co-morbid conditions: heart failure, renal failure, DM and recurrent hypoglycemic attacks**
- **Pregnancy**
- **Iv fluid**
- **Signs of hormonal imbalance thinning of the skin, weakness, weight gain, bruising, hypertension, diabetes, weak bones (osteoporosis), facial puffiness, and in women cessation of periods**
- **Menopause**
  *** Rem: young women have normal 2-3 kg of weight due to monthly hormonal changes.**
- **Change in voice or pattern of hair growth change in shape of face**
- **Signs of hypothyroidism: poor tolerance to cold, dry skin scaly hair constipation**
- **Obesity in family**
- **Any medication intake: steroids, antibiotics (increase candida in intestine increase food absorption) antidepressants, anti-convulsants diabetes medications, oral contraceptives, high blood pressure medications and antihistamines.**
- **Stopping smoking**
- **Hypothyroidism, insulin resistance, polycystic ovary syndrome and Cushing's syndrome are also contributors to obesity.**

Weight loss

Before every thing make sure that pt has no chronic illness

*** History:-**

- **How many kg are lost? If unknown according to clothing or relative view?**
- **The duration of the weight loss, when did you last weigh your self? How much was that? What is your current weight?**

-- Significant weight loss is 10% of original body weight in 6month duration

- **Ask the patient if weight loss is intentional? Are you on diet? Do u take weight loss medications? Orlistat or redutil?**
- **If not ask patient about appetite? Try to get into details of the diet if you have time.**
- **Ask the patient about presence of any problem that prevent eating? Teeth, odentophagia?**
- **Consider malabsorption syndrome ask about diarrhea? Skin dryness, anemia?**
- **Ask about signs of hyperthyroidism: tremor, poor tolerance to heat, palpitations, proximal muscle weakness, tibial myxedema?**
- **Ask about DM signs. Polydipsea,polurea, noctural polyurea?**

- **Ask about constitutional symptoms *Cachexia* is a metabolic disorder of increased energy expenditure leading to weight loss greater than that caused by reduced food intake alone like night sweats or fever lymphadenopathy to exclude malignancy.**
- **Psychological problems may cause weight loss like depression. Anorexia nervosa. *Anorexia* can be defined as *a reduction in food intake caused primarily by diminished appetite*, as opposed to the literal definition of "not eating grief, anxiety, age, alcohol,amphetamine abuse,cd, uc, gastric ulcer,chronic illness, alzhiemir, pheocromocytoma, Parkinson,hiv, addison, stomach cancer.**

Hemoptysis

*** Make sure this is hemoptysis not heatemesis or epistaxis or bleeding gum**
Can u assess the amount?

- **When did it begin?**
- **First episode?**
- **Bleeding from other site?**
- **Use of drugs specially anti_coagulant or anti_platelet**
- **Blood streaking of mucopurulent or purulent sputum**
- **Chronic sputum production + Recent change in quantity or appearance**
- **Fever & chills + Blood streaking of purulent sputum**
- **Putrid smell of purulent sputum**
- **Sudden chest pain &/ SOB**
- **Smoking, Asbestosis, Alcohol**
- **Coma**
- **Poor dental hygiene, Drug Abuse, Sexual Practices**
- **History of blood transfusion**
- **Renal disease, SLE, Malignancy,AIDS**
- **Previous bleeding**

Rememeber there is:

- ✓ ***Idiopathic hemoptysis***
- ✓ ***Cryptogenic hemopysis***
- ✓ ***Factious hempotysis***

<u>Most common causes are:</u>

- **<u>Bronchitis (acute/chronic)</u>**
- **<u>Pneumonia</u>**
- **<u>TB</u>**
- **BronchiactasisCA**

Investigations: Cxr, CT scan, bronchoscopy

Chest pain

* First of all we have to know the exact location of the pain: pleuritic or retrosternal?
  - When does it start? Time of pain and its duration?
  - Is it he first time to feel this?
  - The onset? (Sudden, gradual)
  - The character of pain ? (stabbing, stretching, heaviness, burning ... etc(
  - Radiation? (left shoulder or arm, lower jaw, epigastric area, neck ...
  - Severity? Is it the worst pain you ever had?
  - Does the pain increase with inspiration? (pleuritic, rib fracture)
  - Exacerbation factors: exercise, minor or major effort (carrying heavy or light object), certain drugs, sleep, position or cold
  - Relieving factors? Rest, sublingual pills, antiacids or drugs. Certain position (as leaning forward in pleuritic pain)
  - How many stairs can you go before the beginning of the pain?
  - How much the distance you can walk before the pain appears?
  - Associated symptoms:
    - Dyspnea → cardiac pain, PE, pleurisy, anxiety
    - PND, orthopnea
    - Vomiting → MI (ACS), it can be GI but more suggestive for MI
    - Nausea → MI, GIT reflux
    - Sweating → MI if cold sweating
    - Tenderness → pain on touch suggest costochondritis (Tietze's syndrome), fractured rib, musculoskeletal
    - Palpitation → MI, anxiety
    - Fever, rigor → pneumonia, pleuritis
    - Cough → pneumonia, other respiratory causes or GERD
    - Waterbrush (excessive salivation) → GERD
    - Odynophagia (painful swallowing) → GERD
    - Intermittent dysphagia → esophagial spasm
    - Rash on the chest wall → Herbes - Zoster
    - Skin rash ± arthritis → part of systemic diseases like SLE, RA ... etc
  - Ask about the MI risk factors
    - DM or +ve family history of DM
    - Hypertension or +ve family history of DM
    - Hyperlipidemia, does the patient take statin
    - Smoking (have you ever been a smoker?
    - +ve family history of cardiac disease or death from cardiac causes. +ve if female ≤ 65 year or male ≤ 55 year in first degree relatives.
  - Ask about drug history: it may suggest underlying heart problem or other conditions that may precipitate cardiac disease. Does he take baby aspirin?
  - About medical history: previous admission due to cardiac causes, any ECG have done before or any lab investigation suggestive of DM or hyperlipidemia
  - Social history: the occupation of the patient, any stressful life events, marital status, any recent death in the family. Any history of travel to endemic areas. History of trauma as it can lead to rib fracture.

Constipation

- Age?
- Duration, for how long you have been constipated?
- Frequency or consistency
- How often you have a bowel movement?
- What is the color of your stools?
- Is it mixed with blood or mucus?
- Onset (sudden or gradual)?
- Abdominal pain? Nature? Site?
- Do you have much gas?
- How is you appetite?
- Has there been any change in your weight?
- DM? When diagnosed? Complaint?
- Polyuria, polydypsea or polyphagia?
- Nucturia, weight loss, blurred vision?
- Confusion, vomiting, numbness and parasthesia? Edema?
- Weight gain, slow speech, weak memory, Dry skin, cold intolerance?
- Hair loss, neck surgery?
- Nausea, vomiting, polyuria, anorexia?
- Bone pain, abdominal pain, depression?
- Have you noticed periods of constipation alternating with periods of diarrhea
- Palpitation?
- Drug history: opiates, TCA, laxatives, iron, aluminum antacids?
- Weight loss, night sweats, fever, abdominal distention?
- Pregnancy?

Differential diagnosis:-

Endocrine:
- **DM**
- **Myxoedema (hypothyrodism, hyperparathyrodism)**

Drugs:
- **Morphine, Codeine**
- **Atropin**
- **TCA**
- **Aluminum antacid**
- **Iron**
- **Laxative abuse**

Others:
- **Fissure/ hemorrhoid**
- **Depression**
- **Irritable bowel synd.**
- **Diet changes**
- **Starvation**

Obstruction:
- **Colonic CA**
- **Pregnancy**

Rectal bleeding

*** Rectal bleeding may be manifested by bright red blood, blood mixed with stool or black tarry stools. Bright red blood per rectum also known as hematochezia can occur from colonic tumors, diverticular disease or UC. Blood mixed with stool can be the result of UC, diverticular diseases, tumors or hemorrhoids. Ask the patient:**

- **How long have you noticed bright red blood in your stool?**
- **Is the blood mixed with stool?**
- **Are there streaks of blood on the surface of the stool?**
- **Have you noticed a change in your bowel habits?**
- **Have you noticed a persistent sensation in your rectum that you have to move your bowels but cannot?**

*** Melena is a black tarry stool that results from bleeding above the first section of the duodenum, with partial digestion of hemoglobin. About that ask the patient:**

- **Have you passed more than one black , tarry stool? If yes when?**
- **How long have you been having black stool?**
- **Have you had any nausea, vomiting, diarrhea or abdominal pain associated with these stool?**
- **Do you have weight loss, sweating or fever?**
- **Bleeding anywhere else?**
- **Epigastric pain or abdominal pain?**
- **Any relation to food or hunger?**
- **Difficulty swelling?**
- **Jaundice, bruising, ascitis or had any blood transfusion?**
- **Smoking or alcohol?**
- **Drugs taken? Heparin ... etc**
- **History of bleeding in the family?**
- **History of colon or other GIT cancers?**

Diarrhea

History:-

- Age, sex ...
- When did begin? For how long?
- Frequency? Amount? Consistency?
- Any mucus or pus? → UC, crohn's
- Color? Odor?
- Difficult to flush? Steatorrhea (malabs.)
- Bloody? → UC, crohn's, infective enteritis
- Is so ... streaks? Occult blood?
- At the beginning or at the end of the stool?
- Abdominal distention? Vomiting?
- Associated with food?
- Fever? → inflammatory bowel disease
- History of foreign travel?
- Family history of diarrhea?
- History of cystic fibrosis?
- Alcohol ingestion → pancreatitis
- Prefer cold weather? heat intolerance?
- Increase appetite → hyperthyroidism

Abdominal pain?

- Colicky: infectious enteritis, UC, crohn's, CA, irritable bowel synd. → young patients
- Cramping pain → cholera
- Burning → Z-E syndrome

- Anxiety, tremor, goitre, flushing → hyperthyroidism
- Drug intake? AB, laxatives, magnesium containing antacid
- Weight loss?
- Joint pain → enteropathic spondyloarthropathies
- Dehydration / thirst → Diabetes, infective enteritis
- Muscle wasting? Pancreatic insufficiency
- Skin rash → celiac sprue
- Fatigue → celiac

*** Investigations:**
CBC, ESR (high in inflammation), urine analysis, FBS
Stool culture, serology: anti-gliadinAb, anti-endomysial Ab → celiac sprue
Thyroid function test: TSH,T3,T4
Fecal fat for malabsorption

Differential diagnosis:-

- infectious enteritis: campylobacter, salmonella
- Malabsorption: celiac disease
- Inflammatory: UC, Crohn's disease
- Neoplastic: carcinoma
- Diverticular disease
- Irritable bowel synd.
- Pancreatic: chronic pancreatitis, cystic fibrosis
- Endocrine: hyperthyroidism, Diabetes
- Drugs: antibiotics, laxatives
- Other: anxiety

Fever and petechial rash

* History:

- Age, Gender?
- Previous diagnosis: SLE, thyroid disease → ITP
- Easy bruisability → ITP or TTP
- Location of rash, painful, Itchy?
- Blanchng or not? → not blanching in thrombocytopenic purpura
- Bleeding from any site?
- Epistaxis, melena?
- Drugs? Like heparin
- Neurological symptoms → meningitis, TTP
- Kidney failure symptoms → DIC, TTP
- Jaundice → TTP due to RBC hemolysis
- History of gram -ve sepsis or acute leukemia (DIC)
- Gangrene (DIC)
- Change in nails → splinter hem. In endocarditis
- Change in hands → clubbing in endocarditis
- Dental caries / surgery → endocarditis
- Snake bite → DIC
- Massive blood transfusion → DIC
- History of pregnancy → ITP in pregnancy
- Pallor → anemia in ITP/TTP/DIC
- Chills, night sweats, malaise, weight loss, abdominal enlargement (splenomegaly), osler's nodes (painful pulp infarcts in fingers or toes) → endocarditis
- History of UTI, URTI → endocarditis
- Abortions → endocarditis

Differential diagnosis:-

- ITP
- TTP
- DIC
- Endocarditis
- Meningococcemia

* Investigations

Coagulation studies: ITP/TTP coagulation studies are normal but in DIC they are not

Peripheral smear: ITP enlarged platelets, Schistocytes (TTP)

Bone marrow: ITP increase megakaryocyte count, TTP increase retics

INR is high in DIC

ANA is -ve in primary ITP

CBC: decrease thrombocytes :-)

Blood culture, urine analysis,

1. Cardio respiratory symptoms

a. Chest pain

- **When did the chest pain start?**
  Why: to determine if acute or chronic. If acute onset must consider heart attack, pulmonary embolism, pneumothorax, pericarditis and rib fractures. If chest pain is chronic must consider angina, oesophagitis, hiatus hernia and various chest wall conditions.
- **Is the chest pain constant or intermittent?**
  Why: Constant pain suggests heart attack, pulmonary infarction, dissecting aneurysm and pneumonia. Intermittent pain would suggest angina, Tietze's syndrome and Da Costa's syndrome.
- **Where exactly is the chest pain?**
  Why: e.g. heart attack and angina is typically behind the breastbone; dissecting aneurysm is behind the sternum.
- **Does the pain travel anywhere else?**
  Why: e.g. heart attack pain may radiate to neck, jaw and down left side of arm; esophageal pain may radiate to throat or back; dissecting aneurysm may radiate to between the shoulder blades, abdomen or legs.
- **Can you describe the nature of the chest pain?**
  Why: e.g. heart attack may be described as heavy and crushing; esophageal pain is usually burning; dissecting aneurysm is tearing and searing.
- **What makes the pain better?**
  Why: e.g. if pain is relived by antacids should consider oesophagitis and hiatus hernia; if pain is relieved by nitroglycerine spray should suggest angina but may also be spasm of the esophagus.
- **What makes the pain worse?**
  Why: e.g. If the pain is precipitated or increased by breathing must consider pleurisy, costochondritis, fractured rib and pneumothorax; if pain is aggravated by movement suggests pericarditis; if pain is precipitated by bending, lifting, straining or lying down and is precipitated by certain foods a possible diagnosis is esophageal reflux or spasm.
- **Is there a history of trauma to chest or back?**
- **Associated symptoms:**
  - ✓ **Coughing up blood?**
    Why: must consider pulmonary embolism.
  - ✓ **Fever and pus-like sputum**
    Why: should consider pneumonia.
  - ✓ **Shortness of breath?**
    Why: should consider pneumothorax, pulmonary embolism, pneumonia and congestive heart failure due to heart attack.
  - ✓ **Acid or bitter taste in mouth?**
    Why: may suggest reflux oesophagitis.
  - ✓ **Rash in area of pain?**
    Why: suggests herpes zoster (shingles).
  - ✓ **Symptoms of anxiety?**
    Why: e.g. nervousness, tremor, palpitations, shortness of breath, rapid breathing.
- **Past medical history?**

Why: e.g. diabetes, high blood pressure, high cholesterol, obesity, heart surgery, Rheumatic fever, heart attack, asthma, emphysema, Marfan's syndrome (increases risk of dissecting aneurysm), deep venous thrombosis.

- **Family history?**

Why: e.g. heart attack, angina, heart bypass surgery.

b. Rapid heart beat

- **How long have you had the rapid heart beat (tachycardia)?**

Why: to determine if acute or chronic.

- **Is the rapid heart beat (tachycardia) constant or intermittent?**

Why: Constant rapid heart beat (tachycardia) may signify hyperthyroidism, fever or overuse of caffeine and other drugs. Intermittent rapid heart beat is more likely related to a heart arrhythmia.

- **If the rapid heart beat is intermittent, does it start suddenly?**
- **If the rapid heart beat is intermittent, how long does it last?**
- **Is there a simple explanation for the rapid heart beat?**

Why: There is a normal heart rate increase as a response to various situations such as exercise, exertion, large meal, emotion, nervousness, anxiety, stress, worry, excitement and anger.

- **Associated symptoms**
  - ✓ **Palpitations (unpleasant awareness of the beating of the heart)?**
    Why: Palpitations do not always imply "racing" of the heart.
  - ✓ **Chest pain during an attack of racing heart beat?**
    Why: may indicate angina, heart attack, aortic stenosis.
  - ✓ **Shortness of breath during an attack of racing heart beat?**
    Why: may indicate anxiety with hyperventilation (rapid breathing), mitral stenosis, cardiac failure, asthma, anemia.
  - ✓ **Dizziness or faintness during an attack of rapid heart beat?**
    Why: may indicate a more severe arrhythmia such as sick sinus syndrome, complete heart block, aortic stenosis or associated cerebrovascular disease.
  - ✓ **Fever?**
    Why: Fever itself may cause a rapid heart beat, but must consider bacterial endocarditis and rheumatic fever.
  - ✓ **Passing copious amounts of urine after an attack of rapid heart beat?**
    Why: is characteristic of paroxysmal Supraventricular tachycardia (PSVT).
  - ✓ **Symptoms of hyperthyroidism?**
    Why: e.g. palpitations, increased heart rate, preference for cooler weather, increased appetite, weight loss, increased sweating, tremor, nervousness, irritability, diarrhea, lack of menstrual periods, frequent urination.
  - ✓ **Symptoms of congestive cardiac failure?**
    Why: e.g. palpitations, rapid heart rate, shortness of breath, swelling of the ankles and lower legs.
  - ✓ **Symptoms of anxiety?**

Why: e.g. nervousness, shakiness, tremor, restlessness, irritability, insomnia, poor concentration, heart palpitations, racing heart, sweating, dizziness, diarrhea, lump in throat and frequency of urination.

  - ✓ **Panic attacks?**
    Why: recurrent panic attacks occur in Panic disorder and may cause sudden, unexpected, short-lived episodes of intense anxiety.
  - ✓ **Symptoms of Phaeochromocytoma?**

Why: e.g. paroxysmal episodes of headache, pallor, sweating, chest tightness, tremor and heart palpitations.

✓ **Symptoms of menopause?**

Why: e.g. hot flushes, night sweats, heart palpitations, lightheadedness, dry vaginal, dry skin, headaches and sometimes diffuse hair loss.

- **Past medical history?**

Why: e.g. Rheumatic fever, heart attack, hypertension, cardiomyopathy, stroke (atrial fibrillation increases the risk of stroke 5 fold), myocarditis, heart failure, panic attacks.

- **Medications?**

Why: Many medications may cause rapid heart beat e.g. nasal decongestants; digoxin; almost all anti-arrhythmic drugs (medications taken for abnormal heart rhythms) may worsen existing arrhythmias or provoke new arrhythmias in some people (such as amiodarone, sotalol, verapamil, diltiazem, procainamide, disopyramide, quinidine, lignocaine, flecainide and beta - blockers); thyroid medications; some appetite suppressants; ventolin; theophylline; hydralazine; minoxidil.

- **Dietary history?**

Why: e.g. MSG in Chinese food may precipitates a racing heart beat in some people.

- **Alcohol history?**

Why: some people are sensitive to the effects of alcohol and experience rapid heart beat and palpitations as a side effect.

- **Cigarette smoking?**

Why: some people are sensitive to effects of nicotine and experience rapid heart beat and palpitations.

- **Illicit drug use?**

Why: e.g. cocaine, marijuana, amphetamines - may cause rapid heart beat and palpitations.

- **Caffeine intake? Including coffee, tea, Coke or chocolate**

Why: some people are sensitive to effects of caffeine and experience rapid heart beat and persistent or intermittent palpitations.

c. Shortness of breath

- **How long have you had the shortness of breath?**

Why: to determine if acute or chronic.

- **Was the onset of shortness of breath sudden or gradual?**

Why: if sudden consider adult respiratory distress syndrome, pulmonary embolism, pneumothorax, lung collapse. If gradual onset, consider chronic diseases such as congestive cardiac failure, emphysema and fibrosis.

- **What makes the shortness of breath worse?**

Why: e.g. exercise (see Shortness_of_breath_from_exercise), laying flat in bed.

- **Associated symptoms**

✓ **Cough?**

Why: may be due to lung or heart disease.

✓ **Sputum**

Why: color and quantity? - e.g. large volume pus-like suggests bronchiectasis or pneumonia; foul smelling dark colored suggests lung absoess; pink frothy secretions may be due to left ventricular heart failure; blood in sputum can be a serious sign of lung disease and must always be investigated.

✓ **Audible wheeze?**

Why: may suggest asthma, chronic bronchitis, emphysema, airways obstruction (by a foreign body or tumor) or left ventricular heart failure.

✓ **Chest pain?**

Why: may be due to lung or heart disease.

✓ **Fever?**

Why: e.g. fever at night may suggest tuberculosis, pneumonia or mesothelioma (tumor of lung lining due to asbestos exposure).

✓ **Orthopnea (breathlessness lying down flat)?**

Why: suggests left ventricular heart failure.

✓ **Paroxysmal nocturnal dyspnea (inappropriate severe breathlessness causing waking from sleep)?**

Why: suggests left ventricular failure.

✓ **Stridor (a rasping noise heard loudest on inspiration)?**

Why: indicates obstruction of the larynx, trachea or large airways by a foreign body, a tumor or infection (such as epiglottitis).

✓ **Ankle swelling?**

Why: may suggest heart failure.

✓ **Palpitations of the heart?**

Why: may indicate that heart arrhythmia may be the cause of breath problems.

✓ **Fever and pus-like sputum?**

Why: suggests pneumonia.

✓ **Chest pain with blood in sputum?**

Why: need to rule out pulmonary embolism.

- **Recent history of bleeding?**

Why: e.g. heavy periods with clots, vomiting blood, bloody stools, rectal bleeding - may suggest anemia as the cause for shortness of breath.

- **Past Medical history?**

Why: previous respiratory illness (e.g. pneumonia, tuberculosis, chronic bronchitis); previous heart problems (heart disease, heart attack, heart valve disease); HIV infection (at high risk for Pneumocystis carinii pneumonia); previous high blood pressure; deep venous thrombosis; Rheumatic fever.

- **Medications?**

Why: many different medications can produce lung problems and resultant shortness of breath e.g. pulmonary embolism from oral contraceptive pill; fibrotic lung diseases from cytotoxic agents such as methotrexate, cyclophospharnide and bleomycin; bronchospasm from beta-blockers or non-steroidal anti-inflammatory medications.

- **Cigarette smoking?**

Why: number of packets per day and number of years you have smoked. Smoking is a major cause of lung cancer, chronic bronchitis and emphysema. Passive smoking exposure is also regarded as a significant risk.

- **Drug taking history?**

Why: cocaine, amphetamines or injected narcotic drugs can cause shortness of breath.

- **Alcohol history?**

Why: The drinking of large amounts of alcohol in binges can sometimes result in aspiration pneumonia and alcoholics are also prone to develop pneumococcal or Klebsiella pneumonia.

- **Occupational history?**

Why: e.g. exposure to dusts in mining industries and factories such as asbestos, coal, silica, iron oxide, tin oxide, cotton, beryllium, titanium oxide, silver, nitrogen dioxide, anhydrides; exposure to animals (e.g. Q fever or psittacosis); exposure to moldy hay, humidifiers or air conditioners may result in allergic alveolitis.

- **Family history?**

Why: asthma, cystic fibrosis, emphysema, alpha-1-anti-typsin deficiency, tuberculosis, heart attacks.

d. Breathing difficulties

- **Was the onset sudden or gradual?**
  Why: if sudden consider adult respiratory distress syndrome, pulmonary embolism, pneumothorax, lung collapse. If gradual onset, consider chronic diseases such as congestive cardiac failure, emphysema and fibrosis.
- **What makes the breathing problems worse?**
  Why: e.g. exertion, laying flat in bed.
- **Recent history of bleeding?**
  Why: e.g. heavy periods with clots, vomiting blood, bloody stools, rectal bleeding - may suggest anemia as cause for breathing problems.
- **Past Medical history?**
  Why: previous respiratory illness e.g. pneumonia, tuberculosis, chronic bronchitis; previous heart problems; HIV infection (at high risk for Pneumocystis carinii pneumonia); previous high blood pressure, ischemic heart disease, heart attack, heart valve disease, deep venous thrombosis or Rheumatic fever
- **Medications?**
  Why: many different medications can produce lung problems e.g. pulmonary embolism from oral contraceptive pill; fibrotic lung diseases from cytotoxic agents such as methotrexate, cyclophosphamide and bleomycin; bronchospasm from beta-blockers or non-steroidal anti-inflammatory medications; cough from ACE inhibitor @blood pressure medications.
- **Cigarette smoking?**
  Why: number of packets per day and number of years you have smoked. Smoking is a major risk cause of lung cancer, chronic bronchitis and emphysema. Passive smoking exposure is also regarded as a significant risk.
- **Occupational history?**
  Why: e.g. exposure to dusts in mining industries and factories such as asbestos, coal, silica, iron oxide, tin oxide, cotton, beryllium, titanium oxide, silver, nitrogen dioxide, anhydrides; exposure to animals e.g. Q fever or psittacosis; exposure to moldy hay, humidifiers or air conditioners may result in allergic alveolitis.
- **Family history?**
  Why: asthma, cystic fibrosis, emphysema, alpha-1-anti-typsin deficiency, tuberculosis, heart attacks.
- **Associated symptoms**
  - ✓ **Sputum**
    Why: color and quantity? - e.g large volume pus-like suggests bronchiectasis or pneumonia; foul smelling dark colored suggests lung abscess; pink frothy secretions may due to left ventricular heart failure; blood in sputum can be a serious sign of lung disease and must always be investigated.
  - ✓ **Audible wheeze?**
    Why: may suggest asthma, chronic bronchitis, emphysema, airways obstruction (by a foreign body or tumor) or left ventricular heart failure.
  - ✓ **Stridor (a rasping noise heard loudest on inspiration)?**
    Why: indicates obstruction of the larynx, trachea or large airways by a foreign body, a tumor or infection e.g. epiglottitis.
  - ✓ **Fever?**
    Why: e.g. fever at night may suggest tuberculosis, pneumonia of mesothelioma (tumor of lung lining due to asbestos exposure).
  - ✓ **Chest pain?**
    Why: may be due to lung or heart disease.
  - ✓ **Orthopnea (breathlessness lying down flat)?**

Why: suggests left ventricular heart failure.

✓ **Paroxysmal nocturnal dyspnea (inappropriate severe breathlessness causing waking from sleep)?**

Why: suggests left ventricular failure.

✓ **Ankle swelling?**

Why: may suggest heart failure.

✓ **Palpitations of the heart?**

Why: - may indicate that heart arrhythmia may be the cause of breath problems.

✓ **Fever and pus-like sputum?**

Why: suggests pneumonia.

✓ **Chest pain with blood in sputum?**

Why: need to rule out pulmonary embolism.

- **How long have you had the breathing difficulties?**

Why: to determine if acute or chronic.

- **Drug taking history?**

Why: cocaine or injected narcotic drugs can cause breathing difficulties.

- **Alcohol history?**

Why: The drinking of large amounts of alcohol in binges can sometimes result in aspiration pneumonia and alcobolics are also prone to develop pneumococcal or Klebsiella pneumonia.

e. *Rapid breathing*

- **How long have you had the rapid breathing?**

Why: to determine if acute or chronic.

- **Was the onset sudden or gradual?**

Why: if sudden consider adult respiratory distress syndrome, pulmonary embolism, pneumothorax, lung collapse or panic attack. If gradual onset, consider chronic diseases such as congestive cardiac failure, emphysema and fibrosis.

- **What makes the rapid breathing worse?**

Why: e.g. exertion, laying flat in bed, anxiety, fears.

- **Is there a simple, everyday explanation for rapid breathing?**

Why: e.g. exercise, exertion, poor physical condition (unfit), stress.

- **Recent history of bleeding?**

Why: e.g. heavy periods with clots, vomiting blood, bloody stools, rectal bleeding - may suggest anemia as cause for the rapid breathing.

- **Current stressors?**

Why: e.g. interpersonal relationships, physical health, occupational stressors or financial worries - anxiety and panic states are usually in some understandable relationship to stressful life events. Anxiety and panic states may cause rapid breathing.

- **Past Medical history?**

Why: previous respiratory illness (e.g. pneumonia, tuberculosis, chronic bronchitis); previous heart problems; HIV infection (at high risk for Pneumocystis carinii pneumonia); previous high blood pressure, ischemic heart disease, heart attack, heart valve disease, deep venous thrombosis or Rheumatic fever.

- **Associated symptoms**

✓ **Cough?**

✓ **Sputum**

Why: color and quantity? - e.g. large volume pus-like may suggest bronchiectasis or pneumonia; foul smelling dark colored suggests lung abscess; pink frothy secretions may

due to left ventricular heart failure; blood in sputum can be a serious sign of lung disease and must always be investigated.

✓ **Audible wheeze?**

Why: may suggest asthma, chronic bronchitis, emphysema, airways obstruction (by a foreign body or tumor) or left ventricular heart failure.

✓ **Chest pain?**

Why: may be due to lung or heart disease.

✓ **Fever?**

Why: e.g. fever at night may suggest tuberculosis, pneumonia of mesothelioma (tumor of lung lining due to asbestos exposure).

✓ **Orthopnea (breathlessness lying down flat)?**

Why: suggests left ventricular heart failure.

✓ **Paroxysmal nocturnal dyspnea (inappropriate severe breathlessness causing waking from sleep)?**

Why: suggests left ventricular failure.

✓ **Stridor (a rasping noise heard loudest on inspiration)?**

Why: indicates obstruction of the larynx, trachea or large airways by a foreign body, a tumor or infection such as epiglottitis.

✓ **Ankle swelling?**

Why: may suggest heart failure.

✓ **Palpitations of the heart?**

Why: may indicate that heart arrhythmia may be the cause of rapid breathing.

✓ **Fever and pus-like sputum?**

Why: suggests pneumonia.

✓ **Chest pain with blood in sputum?**

Why: need to rule out pulmonary embolism.

✓ **Panic attacks?**

Why: recurrent panic attacks occur in Panic disorder and may cause sudden, unexpected, short-lived episodes of intense anxiety.

✓ **Symptoms of anxiety?**

Why: e.g. nervousness, shakiness, tremor, restlessness, irritability, insomnia, poor concentration, heart palpitations, racing heart, sweating, dizziness, diarrhea, lump in throat and frequency of urination.

✓ **Phobias?**

Why: persistent, irrational fear with a compelling desire to avoid the object or situation occurs in Phobia disorders and may be confused with generalized anxiety disorder or be associated with anxiety.

- **Past psychiatric history?**

Why: e.g. panic attacks, anxiety.

- **Medications?**

Why: many different medications can produce lung problems and rapid breathing (e.g. pulmonary embolism from oral coptraceptive pill); fibrotic lung diseases from cytotoxic agents such as methotrexate, cyclophosphamide and bleomycin; bronchospasm from beta-blockers or non-steroidal anti-inflammatory medications.

- **Cigarette smoking?**

Why: number of packets per day and number of years you have smoked. Smoking is a major risk cause of lung cancer, chronic bronchitis and emphysema. Passive smoking exposure is also regarded as a significant risk.

- **Drug taking history?**

Why: cocaine and amphetamine intoxication can cause rapid breathing.

- **Alcohol history?**

Why: The drinking of large amounts of alcohol in binges can sometimes result in aspiration pneumonia. Alcoholics are also prone to develop pneumococcal or Klebsiella pneumonia.

- **Occupational history?**

Why: e.g. exposure to dusts in mining industries and factories (such as asbestos, coal, silica, iron oxide, tin oxide, cotton, beryllium, titanium oxide, silver, nitrogen dioxide, anhydrides); exposure to animals (e.g. Q fever or psittacosis); exposure to moldy hay, humidifiers or air conditioners may result in allergic alveolitis.

- **Family history?**

Why: asthma, cystic fibrosis, emphysema, alpha-1-anti-typsin deficiency, tuberculosis, heart attacks, anxiety, panic disorder, heart attacks.

f. Cough

- **How long have you had the cough?**

Why: to determine if acute or chronic i.e. chronic cough is a cough that has been present and not improving for more than 4 weeks. Acute cough may suggest acute upper respiratory tract infection (e.g. common cold or influenza), viral pneumonia or bacterial pneumonia. A chronic cough is more suggestive of pneumoconiosis (lung disorder caused by inhalation of mineral dusts, organic dusts, fumes and vapors), chronic bronchitis, emphysema, bronchiectasis, tuberculosis, lung cancer or asthma.

- **How would you describe the cough?**

Why: e.g. paroxysmal with whoops suggest whooping cough, painful cough may suggest left ventricular heart failure, weak cough may suggest lung cancer, bovine (no power to cough) suggests vocal cord paralysis.

- **What time of the day is the cough worse?**

Why: e.g. cough at night may suggest asthma, left ventricular failure, postnasal drip, chronic bronchitis, whooping cough; cough on waking may suggest bronchiectasis, chronic bronchitis or gastro-esophageal reflux.

- **Is the cough related to meals?**

Why: e.g. esophageal diverticulum, tracheo-esophageal fistula.

- **Is there a possibility of a foreign body?**

Why: such as a peanut having gone down the wrong way?

- **Associated symptoms**
  - ✓ **Sputum production?**

Why: If there is sputum production, describe it? - e.g. copious amounts with offensive smell suggests bronchiectasis; pus-like sputum may suggest pneumonia, abscess, tuberculosis or bronchiectasis; yellow-green thick and sticky may suggest asthma; profuse and watery may suggest lung cancer; red-currant jelly may suggest lung cancer; pink and frothy may suggest left ventricular failure with pulmonary edema.

  - ✓ **Blood in sputum?**

Why: may suggest chronic bronchitis, tuberculosis, bronchiectasis, lung cancer, lung metastasis, foreign body, left ventricular failure and mitral stenosis.

  - ✓ **Wheeze?**

Why: usually suggests asthma but may also be chronic bronchitis, emphysema, foreign body, lung cancer, congestive heart failure.

  - ✓ **If has had a wheeze, have you had previous attacks of wheezing, hay fever or eczema?**

Why: more likely to suggest asthma as cause of chronic cough.

  - ✓ **Shortness of breath?**

Why: In acute cases may suggest congestive heart failure, pulmonary embolism and pneumonia. In chronic cases may suggest emphysema, chronic pulmonary fibrosis, chronic congestive heart failure, tuberculosis and lung cancer.

✓ **Burning sensation in throat or chest when you cough?**

Why: may suggest gastro-esophageal reflux as cause of chronic cough.

✓ **Weight loss?**

Why: may suggest lung cancer, laryngeal cancer, tuberculosis, cystic fibrosis.

✓ **Swelling of the legs?**

Why: may suggest left ventricular heart failure.

✓ **Stridor?**

Why: may suggest whooping cough, foreign body, cancer of the larynx, cancer of the trachea.

✓ **Fever?**

Why: may suggest bacterial or viral pneumonia, tuberculosis, lung abscess, lung cancer or lung infarction.

✓ **Leg swelling?**

Why: may suggest congestive heart failure.

- **Past medical history?**

Why: recurrent lung infections from childhood may suggest cystic fibrosis or bronchiectasis; hay fever and eczema makes the chance of asthma more likely; heart attack, high blood pressure, rheumatic heart disease increase the risk of congestive cardiac failure.

- **Medications?**

Why: E.g. ACE inhibitor blood pressure medications are well known to cause a cough.

- **Family history?**

Why: e.g. asthma; cystic fibrosis; emphysema (alpha 1- antitrypsin deficiency);anyone in the family had tuberculosis or a chronic cough.

- **Cigarette smoking**

Why: past and present? - increases the risk of emphysema, chronic bronchitis, lung cancer, larynx cancer.

- **Are you exposed to any smoke or fumes?**
- **Occupational history?**

Why: e.g. exposure to asbestos; miners exposure to coal dust or silica; aircraft makers and shipbuilders exposure to berylliosis and asbestosis; farmers exposure to bacteria in hay and causing "farmer's lung"; pigeon breeders exposed to protein from bird feathers and excreta causing "bird fancier's lung".

g. Coughing blood

- **How long have you been coughing up blood?**

Why: to determine if acute or chronic.

- **What quantity of blood do you cough up?**

Why: e.g. may range from small flecks of blood to massive bleeding. Massive bleeding is usually due to bronchiectasis or tuberculosis.

- **Are you sure that the blood is coughed up?**

Why: e.g. may be confused with blood-stained saliva caused by bleeding from the nose, pharynx or sinuses or may also be confused with vomiting of blood.

- **How would you describe the cough itself?**

Why: e.g. painful cough may suggest left ventricular heart failure, weak cough may suggest lung cancer.

- **What time of the day is the cough worse?**

Why: e.g. cough at night left ventricular failure; cough on waking may suggest bronchiectasis.

- **Is there a possibility of a foreign body such as a peanut having gone down the wrong way?**
- **Associated symptoms**
  - ✓ **Sputum production?**

  Why: If there is sputum production, describe it? - e.g. copious amounts with offensive smell suggests bronchiectasis or lung abscess; pus-like sputum may suggest pneumonia, abscess, tuberculosis or bronchiectasis; profuse and watery may suggest lung cancer; red-currant jelly may suggest lung cancer; pink and frothy may suggest left ventricular failure with pulmonary edema.
  - ✓ **Fever and sputum?**

  Why: suggests pneumonia, lung abscess, tuberculosis and bronchiectasis. However bronchiectasis does not commonly cause fever.
  - ✓ **Chest pain?**

  Why: should suspect pulmonary embolism.
  - ✓ **Wheeze?**

  Why: may suggest foreign body, lung cancer, congestive left ventricular heart failure.
  - ✓ **Shortness of breath?**

  Why: In acute cases may suggest congestive heart failure, pulmonary embolism and pneumonia. In chronic cases may suggest chronic congestive heart failure, mitral stenosis, tuberculosis and lung cancer.
  - ✓ **Weight loss?**

  Why: may suggest lung cancer, tuberculosis, cystic fibrosis.
  - ✓ **Swelling of the legs?**

  Why: may suggest left ventricular heart failure.
  - ✓ **Stridor?**

  Why: may suggest foreign body.
  - ✓ **Leg swelling?**

  Why: may suggest congestive heart failure.
  - ✓ **Symptoms of bleeding disorder?**

  Why: e.g. easy bruising, heavy menstrual periods, bleeding nose, rectal bleeding.

- **Past medical history?**

  Why: recurrent lung infections from childhood may suggest cystic fibrosis or bronchiectasis; heart attack, high blood pressure, rheumatic heart disease increase the risk of congestive cardiac failure; bleeding disorder.
- **Medications?**

  Why: e.g. warfarin and non-steroidal anti-inflammatory medications may increase the risk of coughing blood.
- **Family history?**

  Why: e.g. cystic fibrosis; anyone in the family had tuberculosis or a chronic cough; bleeding disorders.
- **Cigarette smoking**

  Why: past and present? - increases the risk of lung cancer and chronic bronchitis and worsens outcome for tuberculosis, pneumonia and bronchiectasis.

h. Dry cough

- **How long have you had the dry cough?**

  Why: to establish if acute or chronic i.e. chronic cough is a cough that has been present and not improving for more than 4 weeks.
- **Is the cough truly dry?**

Why: a dry cough is a non-productive cough without producing sputum. Many respiratory infections start out as a dry cough, and then become a wet_cough or productive cough as the lungs start to produce more sputum. Some types of chronic_cough or severe_cough may remain a dry cough, or become a persistent dry cough.

- **How would you describe the cough?**

Why: e.g. paroxysmal with whoops suggest whooping cough, painful cough may suggest left ventricular heart failure, weak cough may suggest lung cancer, bovine (no power to cough) suggests vocal cord paralysis.

- **What time of the day is the cough worse?**

Why: e.g. cough at night may suggest asthma, left ventricular failure, postnasal drip, whooping cough; cough on waking may suggest gastro-esophageal reflux.

- **Is the cough related to meals?**
- **Associated symptoms**
  - ✓ **Wheeze?- usually suggests asthma but may also be foreign body, lung cancer, congestive heart failure**
  - ✓ **If has had a wheeze, have you had previous attacks of wheezing, hay fever or eczema?**

Why: more likely to suggest asthma as cause of dry cough.

- ✓ **Shortness of breath?**

Why: may suggest asthma, pulmonary fibrosis, left ventricular failure and lung cancer.

- ✓ **Burning sensation in throat or chest when you cough?**

Why: may suggest gastro-esophageal reflux as cause of chronic cough.

- ✓ **Weight loss?**

Why: may suggest lung cancer, laryngeal cancer.

- ✓ **Swelling of the legs?**

Why: may suggest left ventricular heart failure.

- ✓ **Stridor?**

Why: may suggest whooping cough, foreign body, cancer of the larynx, cancer of the trachea.

- ✓ **Fever?**

Why: may suggest upper respiratory tract infection, influenza, pneumonia, croup, measles, whooping cough, Legionaire's disease, Lassa fever, bronchiolitis.

- **Past medical history?**

Why: Left ventricular failure may be due to heart attack, cardiomyopathy, hypertension, valvular heart disease secondary to previous rheumatic fever.

- **Medications?**

Why: e.g. ACE inhibitor blood pressure medications are well known to cause a cough.

- **Family history?**

Why: e.g. asthma; anyone in family had a recent acute dry cough (may suggest a contagious source).

- **Cigarette smoking**

Why: past and present? - increases the risk of emphysema, chronic bronchitis, lung cancer, larynx cancer.

- **Are you exposed to any smoke or fumes?**

Why: pollutant irritation may cause dry cough.

- **Occupational history?**

Why: e.g. exposure to asbestos; miners exposure to coal dust or silica; aircraft makers and shipbuilders exposure to berylliosis and asbestosis; farmers exposure to bacteria in hay and causing "farmer's lung"; pigeon breeders exposed to protein from bird feathers and excreta causing "bird fancier's lung".

i. Persistent cough

- **How long have you had the cough?**

Why: to establish if truly chronic or persistent i.e. cough that has been present and not improving for more than 4 weeks.

- **How would you describe the cough?**

Why: e.g. paroxysmal with whoops suggest whooping cough; painful cough may suggest left ventricular heart failure; weak cough may suggest lung cancer; bovine (no power to cough) suggests vocal cord paralysis.

- **What time of the day is the cough worse?**

Why: e.g. cough at night may suggest asthma, left ventricular failure, postnasal drip, chronic bronchitis, whooping cough; cough on waking may suggest bronchiectasis, chronic bronchitis or gastro-esophageal reflux.

- **Is the cough related to meals?**

Why: e.g. esophageal diverticulum, tracheo-esophageal fistula.

- **Associated symptoms**

✓ **Sputum production?**

Why: If there is sputum production, describe it? - e.g. copious amounts with an offensive smell suggests bronchiectasis; yellow-green thick and sticky may suggest asthma; profuse and watery may suggest lung cancer; red-currant jelly may suggest lung cancer; pink and frothy may suggest left ventricular failure with pulmonary edema.

✓ **Blood in sputum?**

Why: may suggest chronic bronchitis, tuberculosis, bronchiectasis, lung cancer, lung metastasis, foreign body, left ventricular failure and mitral stenosis.

✓ **Wheeze?**

Why: usually suggests asthma but must also consider chronic bronchitis, emphysema, foreign body, lung cancer, congestive heart failure.

✓ **If you do have a wheeze, have you had previous attacks of wheezing, hay fever or eczema in the past?**

Why: more likely to suggest asthma as a cause of chronic cough.

✓ **Shortness of breath?**

Why: may suggest asthma, pulmonary fibrosis, left ventricular failure, tuberculosis, emphysema and lung cancer.

✓ **Burning sensation in throat or chest when you cough?**

Why: may suggest gastro-esophageal reflux as a cause of chronic cough.

✓ **Weight loss?**

Why: may suggest lung cancer, laryngeal cancer, tuberculosis, cystic fibrosis.

✓ **Swelling of the legs?**

Why: may suggest left ventricular heart failure.

✓ **Stridor?**

Why: may suggest whooping cough, foreign body, cancer of the larynx, cancer of the trachea.

✓ **Fever?**

Why: may suggest tuberculosis, lung abscess, lung cancer

- **Past medical history?**

Why: recurrent lung infections from childhood may suggest cystic fibrosis or bronchiectasis.

- **Medications?**

Why: e.g. ACE inhibitor blood pressure medications are well known to cause a cough.

- **Family history?**

Why: e.g. asthma; cystic fibrosis; emphysema (alpha 1- antitrypsin deficiency);anyone in the family had tuberculosis or a persistent cough.

- **Cigarette smoking**

Why: past and present? - increases the risk of emphysema, chronic bronchitis, lung cancer, larynx cancer.

- **Are you exposed to any smoke or fumes?**
- **Occupational history?**

Why: e.g. exposure to asbestos; miners exposure to coal dust or silica; aircraft makers and shipbuilders exposure to berylliosis and asbestosis; farmers exposure to bacteria in hay and causing "farmer's lung"; pigeon breeders exposed to protein from bird feathers and excreta causing "bird fancier's lung".

j. Respiratory symptoms

- **How long have you had the respiratory symptoms?**

Why: to determine if acute or chronic e.g. chronic cough is a cough that has been present and not improving for more than 4 weeks. Acute cough may suggest acute upper respiratory tract infection (e.g. common cold or influenza), viral pneumonia or bacterial pneumonia. A chronic cough is more suggestive of pneumoconiosis (lung disorder caused by inhalation of mineral dusts, organic dusts, fumes and vapors), chronic bronchitis, emphysema, bronchiectasis, tuberculosis, lung cancer or asthma.

- **What respiratory symptoms do you have?**

Why: e.g. cough, shortness of breath, fever, chest pain.

- **If you have a cough, how would you describe the cough?**

Why: e.g. paroxysmal with whoops suggest whooping cough; painful cough may suggest left ventricular heart failure; weak cough may suggest lung cancer, bovine (no power to cough) suggests vocal cord paralysis.

- **If you have a cough, what time of the day is the cough worse?**

Why: e.g. cough at night may suggest asthma, left ventricular failure, postnasal drip, chronic bronchitis, whooping cough; cough on waking may suggest bronchiectasis, chronic bronchitis or gastro-esophageal reflux.

- **If you have a cough, is the cough related to meals?**

Why: e.g. esophageal diverticulum, tracheo-esophageal fistula.

- **Is there a possibility of a foreign body such as a peanut having gone down the wrong way?**
- **Associated symptoms**

✓ **Sputum production?**

Why: If there is sputum production, describe it? - e.g. copious amounts with offensive smell suggests bronchiectasis; pus-like sputum may suggest pneumonia, abscess, tuberculosis or bronchiectasis; yellow-green thick and sticky may suggest asthma; profuse and watery may suggest lung cancer; red-currant jelly may suggest lung cancer; pink and frothy may suggest left ventricular failure with pulmonary edema.

✓ **Blood in sputum?**

Why: may suggest chronic bronchitis, tuberculosis, bronchiectasis, lung cancer, lung metastasis, foreign body, left ventricular failure and mitral stenosis.

✓ **Wheeze?**

Why: usually suggests asthma but may also be chronic bronchitis, emphysema, foreign body, lung cancer, congestive heart failure.

✓ **If you have had a wheeze, have you had previous attacks of wheezing, hay fever or eczema?**

Why: more likely to suggest asthma as cause of chronic cough.

✓ **Shortness of breath?**

Why: In acute cases may suggest congestive heart failure, pulmonary embolism and pneumonia. In chronic cases may suggest emphysema, chronic pulmonary fibrosis, chronic congestive heart failure, tuberculosis and lung cancer.

✓ **Orthopnea (breathlessness lying down flat)?**

Why: suggests left ventricular heart failure.

✓ **Paroxysmal nocturnal dyspnea (inappropriate severe breathlessness causing waking from sleep)?**

Why: suggests left ventricular failure.

✓ **Burning sensation in throat or chest when you cough?**

Why: may suggest gastro-esophageal reflux as cause of chronic cough.

✓ **Weight loss?**

Why: may suggest lung cancer, laryngeal cancer, tuberculosis, cystic fibrosis, lung abscess.

✓ **Swelling of the legs?**

Why: may suggest left ventricular heart failure.

✓ **Stridor?**

Why: may suggest whooping cough, foreign body, cancer of the larynx, cancer of the trachea.

✓ **Fever?**

Why: may suggest bacterial or viral pneumonia, tuberculosis, lung abscess, lung cancer or lung infarction. Fever at night may suggest tuberculosis, pneumonia of mesothelioma (tumor of lung lining due to asbestos exposure).

✓ **Leg swelling?**

Why: may suggest congestive heart failure.

✓ **Symptoms of congestive cardiac failure?**

Why: e.g. fatigue (especially exertional fatigue), increasing shortness of breath on exertion, bilateral ankle swelling that is usually symmetrical and worse in the evenings, with improvement during the night. As the heart failure progresses, swelling ascends to involve the legs, thighs, genitalia and abdomen. May experience paroxysmal nocturnal dyspnea (severe shortness of breath which wakes the person from sleep so that they are forced to get up gasping for breath).

✓ **Symptoms of chronic bronchitis?**

Why: e.g. productive cough on most days for at least three months of the year for at least two consecutive years, shortness of breath, wheeze.

✓ **Symptoms of pneumonia?**

Why: e.g. fever, sharp chest pain worse with coughing and breathing, green sputum, shortness of breath. May have blood stained sputum.

✓ **Symptoms of asthma?**

Why: e.g. intermittent wheeze, shortness of breath and cough. Cough is often worse at night.

✓ **Symptoms of sarcoidosis?**

Why: e.g. shortness of breath, cough, tiredness, joint pain, skin symptoms occur in 10% of cases and may include purple or brown plaques or nodules on face, nose, ears and neck in chronic sarcoidosis.

- **Past medical history?**

Why: recurrent lung infections from childhood may suggest cystic fibrosis or bronchiectasis; hay fever and eczema makes the chance of asthma more likely; heart attack, high blood pressure and rheumatic heart disease increase the risk of congestive cardiac failure.

- **Medications?**

Why: many different medications can produce respiratory problems e.g. pulmonary embolism from oral contraceptive pill; fibrotic lung diseases from cytotoxic agents such as methotrexate, cyclophosphamide and bleomycin; bronchospasm from beta-blockers or non-steroidal anti-inflammatory medications; cough from ACE inhibitor blood pressure medications.

- **Family history?**

Why: e.g. asthma; cystic fibrosis; emphysema (alpha 1- antitrypsin deficiency);anyone in the family had tuberculosis or a chronic cough.

- **Cigarette smoking**

Why: number of packets per day and number of years you have smoked. Smoking is a major risk cause of lung cancer, chronic bronchitis and emphysema. Passive smoking exposure is also regarded as a significant risk.

- **Are you exposed to any smoke or fumes?**
- **Alcohol history?**

Why: The drinking of large amounts of alcohol in binges can sometimes result in aspiration pneumonia and alcoholics are also prone to develop pneumococcal or Klebsiella pneumonia.

- **Occupational history?**

Why: e.g. exposure to dusts in mining industries and factories such as asbestos, coal, silica, iron oxide, tin oxide, cotton, beryllium, titanium oxide, silver, nitrogen dioxide, anhydrides; farmers exposure to bacteria in hay and causing "farmer's lung"; pigeon breeders exposed to protein from bird feathers and excreta causing "bird fancier's lung.

2. *GIT symptoms*

a. *Diarrhea*

- **How long have you had diarrhea?**

Why: to determine if acute or chronic. Acute diarrhea (without blood) is more likely to be infectious in nature e.g. staphylococcal toxin food poisoning, giardiasis, traveler's diarrhea, a virus or contaminated food. Chronic diarrhea has a large number of causes.

- **What exactly do you mean by diarrhea?**

Why: the symptom diarrhea may be defined in a number of different ways. Some people complain of frequent stool (more than 3 per day being abnormal) or they may complain of a change in the consistency of the stools which have become loose or watery.

- **If diarrhea is acute**
- **How frequent are the stools?**
- **What is the volume of the diarrheal stools?**

Why: e.g. high volume stools may be suggestive of infection (such as E.Coli, Staphylococcus aureus, Vibrio Cholerae), carcinoid syndrome, bowel polyp, Zollinger-Ellison syndrome, magnesium antacids, lactose intolerance or after gastric surgery; small volume stools may suggest inflammatory bowel disease or colon cancer.

- **What is the nature of the stools?**

Why: e.g. fatty, pale colored, extremely smelly stools that float in the toilet and are difficult to flush away is called steatorrhea due to excess fat in the stool and are characteristic of malabsorption of nutrients which may be due to celiac disease, chronic pancreatitis, previous gastrectomy and cystic fibrosis.

- **Does the diarrhea persist on fasting?**

Why: may suggest an infection (such as E.Coli, Staphylococcus aureus, Vibrio cholerae), vasoactive intestinal polypeptide secreting tumor, Zollinger-Ellison syndrome, carcinoid syndrome and villous bowel polyp.

- **If diarrhea is acute, where did you eat in the 24 hours before he diarrhea started and what food have you eaten during this time?**

Why: may help in discovering the source of possible food poisoning.

- **Have any other family members experienced acute diarrhea also?**

Why: may suggest toxic staphylococcal gastroenteritis, Salmonella, Shigella, Campylobacter pylori.

- **Has there been recent foreign travel?**

Why: may suggest traveler's diarrhea, cholera, shigellosis, salmonellosis and giardiasis

- **Associated symptoms**

✓ **Blood in the stool?**

✓ **Why:** If acute diarrhea, may suggest Salmonella, Shigella, Campylobacter jejuni, ulcerative colitis and amebic dysentery. If chronic diarrhea, may suggest ulcerative colitis, bowel cancer, diverticulitis, amoebiasis, Zollinger-Ellison syndrome.

✓ **Mucous in stool?**

✓ **Why:** suggests ulcerative colitis, Crohn's disease and irritable bowel syndrome.

✓ **Fever?**

✓ **Why:** may suggest Salmonella, Shigella, Campylobacter jejuni and ulcerative colitis, severe amoebic dysentery or pseudomembranous colitis. May get a low grade temperature with traveler's diarrhea and toxic staphylococcal gastroenteritis.

✓ **Severe vomiting?**

✓ **Why:** may suggest toxic staphylococcal gastroenteritis (which follows 2-4 hours after eating food poisoned with the toxin), traveler's diarrhea and viral gastroenteritis.

✓ **Alternating diarrhea and constipation, abdominal bloating, abdominal pain that is relieved by opening the bowels or passing wind?**

✓ **Why:** may suggests irritable bowel syndrome.

✓ **Pain in joints, back pain, eye trouble or mouth ulceration?**

✓ **Why:** may suggest inflammatory bowel disease.

✓ **Neurological symptoms?**

✓ **Why:** e.g. double vision, blurred vision, sensitivity of the eyes to light, poor coordination and difficulty with speaking - may suggest botulism caused by the neurotoxin of clostridium botulinum which flourishes in preserved anaerobic food.

- **Medications?**

Why: e.g. recent antibiotics may predispose to pseudomembranous colitis; medications that can cause diarrhea include digitalis, diuretics, beta-blockers, aspirin, colchicines, other non-steroidal anti-inflammatory medications; overuse of laxative may also cause diarrhea.

- **Alcohol history?**

Why: it is well known that alcohol can cause diarrhea.

6. Constipation

- **When did the constipation start?**

Why: to determine if acute or chronic e.g. if acute may suggest intestinal obstruction or bowel cancer. If constipation is chronic need to investigate the dietary history, emotional status and toilet habits. If the constipation occurs from birth must consider Hirschsprung's disease.

- **Frequency of bowel movements?**

Why: to establish severity.

- **Consistency of bowel movements?**

Why: to establish if true constipation i.e. less than 3 stools per week or stools that are hard to evacuate.

- **Dietary history?**

Why: e.g. fast food is usually devoid of fiber, weight loss diets may be low in fiber; lack of dietary fiber in diet e.g. fruit, vegetables and wholemeal products.

- **Toilet habits over the life span?**

Why: E.g. a common cause of chronic constipation is the habitual neglect of the impulse to defecate leading to accumulation of large, dry faecal masses which causes constant rectal distension from feces and consequent reduced awareness of rectal fullness.

- **Associated symptoms**

✓ **Bloody stool with painful evacuation?**
✓ **Why:** may suggest hemorrhoids or anal fissure. If defecation is painful it may cause you to delay moving your bowels due to fear of the pain which may further perpetuate the problem.
✓ **Bloody stool with painless evacuation?**
✓ **Why:** may suggest colon cancer or diverticulitis.
✓ **Blood and mucous in the stool?**
✓ **Why:** may suggest inflammatory bowel disease.
✓ **Fecal incontinence?**
✓ **Why:** may suggest constipation with overflow of liquid feces. This can occur in children and adults.
✓ **Symptoms of intestinal obstruction?**
✓ **Why:** e.g. abdominal pain, vomiting, loud bowel sounds.
✓ **Symptoms of irritable bowel syndrome?**
✓ **Why:** e.g. passage of pellet-like stools, alternating constipation and diarrhea, associated with abdominal pain which is relieved by defecation, passage of mucous per rectum, feeling of incomplete emptying of the rectum after defection and visible abdominal distention.
✓ **Symptoms of bowel cancer?**
✓ **Why:** e.g. may also have alternating constipation and diarrhea, rectal bleeding or bloody stool, weight loss.
✓ **Urinary retention?**
✓ **Why:** suggest neurological conditions.
✓ **Pregnant?**
✓ **Why:** constipation is a common problem in pregnancy

- **Past medical history?**

Why: e.g. certain conditions may predispose to constipation including depression, hypothyroidism, hypocalcaemia (low calcium in blood), diabetes, phaeochromocytoma, porphyria, hypokalaemia (low potassium in blood).

- **Past history of neurological conditions?**

Why: E.g. aganglionosis, Hirschsprung's disease, autonomic neuropathy, spinal cord injury, multiple sclerosis.

- **Past obstetric history?**

Why: e.g. difficult prolonged vaginal deliveries - damage to the pelvic floor muscles or nerves may cause constipation.

- **Medication?**

Why: e.g. constipation can arise from ingestion of drugs e.g. codeine, antidepressants, aluminium or calcium antacids, antispasmodics for ulcer or urinary incontinence; the chronic use of laxatives can also lead to lazy bowel.

c. Jaundice-like symptoms

- **How long have you had the jaundice symptoms?**

Why: to determine if acute or chronic.

- **What jaundice symptoms do you have?**

Why: e.g. yellowing of skin, yellowing of the sclera of the eyes, pale stool, dark urine.

- **Is the person with jaundice a newborn baby?**

Why: Jaundice in a newborn is apparent clinically in 50% of term infants and more than 80% of premature infants. It is mostly physiological and benign. However, in a minority of babies it is a sign of serious underlying disease and should not be ignored e.g. blood group incompatibilities, infections, hypothyroidism, red cell membrane disorders, red cell enzyme deficiencies, Crigler-Najjar syndrome.

- **Have there been any previous episodes of jaundice?**
- **Has there been any contact with people with jaundice?**
- **Has there been a recent snake bite?**

Why: snake venom may cause jaundice.

- **Associated symptoms**
  - ✓ **Dark urine and pale stools?**
  - ✓ **Why:** occurs with obstructive or cholestatic type jaundice such as gallstones, cancer of the pancreas, cancer of the bile duct, strictures of the bile duct, some medications, recurrent jaundice of pregnancy.
  - ✓ **Abdominal pain?**
  - ✓ **Why:** In a person with jaundice may suggest common duct stones, sclerosing cholangitis, pancreatic cancer, bile duct cancer, pancreatitis, viral or alcoholic hepatitis.
  - ✓ **Itching of the skin?**
  - ✓ **Why:** suggests cholestatic liver disease such as viral hepatitis, alcoholic hepatitis, recurrent jaundice of pregnancy, primary biliary cirrhosis, common bile duct gallstones, cancer of the bile ducts, cholangitis, pancreatitis, biliary stricture, some medications.
  - ✓ **Weight loss?**
  - ✓ **Why:** may suggest pancreas or bile duct cancer if associated with jaundice.
  - ✓ **Fever?**
  - ✓ **Why:** In a person with jaundice may suggest cholangitis, viral hepatitis, pancreatitis or severe alcoholic hepatitis.
  - ✓ **Fever, right upper quadrant pain or tender liver?**
  - ✓ **Why:** these findings would suggest viral hepatitis, cholecystitis, infectious mononucleosis, leptospirosis, ascending cholangitis, hepatic vein thrombosis and toxic hepatitis.

- **Past medical history?**

Why: some medical conditions may cause jaundice including haemolytic anemia, gallstones, cancer of the pancreas, cancer of the bile duct, strictures of the bile duct, hepatitis, cirrhosis of the liver and congestive cardiac failure; sclerosing cholangitis is a cause of jaundice and may be associated with ulcerative colitis.

- **Past Surgical history?**

Why: e.g. prosthetic heart valve induced hemolysis may cause jaundice; certain anesthetics such as halothane may cause jaundice.

- **Medications?**

Why: many medications may cause jaundice including isoniazid, methyldopa, halothane, ketoconazole, niacin, nitrofurantoin, disulfiram, rifampin, testosterone, propylthiouracil, oral contraceptives, mercury.

- **Dietary history?**

Why: e.g. excessive consumption of carotene due to intemperate eating of carrots, pumpkin, pawpaw or mangoes can cause yellow discoloration of the skin and be confused with jaundice; recent consumption of shellfish may suggest Hepatitis a infection that can cause jaundice; recent consumption of broad beans may indicate favism as a cause of hemolysis and jaundice.

- **Family history?**

Why: e.g. hemochromatosis, Dubin-Johnson syndrome, Rotor syndrome, thalassemia major, congenital spherocytosis.

- **Alcohol history?**

Why: may suggest risk of alcoholic hepatitis or cirrhosis which can cause jaundice.

- **Intravenous drug use?**

Why: increase the risk of hepatitis B and hepatitis C infection that can cause jaundice.

- **Sexual history?**

Why: to determine risk of hepatitis B infection that can cause jaundice.

- **Travel history?**

Why: to determine if travel is to areas with an increased risk of Hepatitis A infection, yellow fever, malaria, dengue fever, Ebola virus, Marberg virus.

- **Occupational history?**

Why: e.g. exposure to hazards or animals (e.g. toxoplasmosis, leptospirosis, Q fever).

- **Possible poisoning?**

Why: e.g. carbon tetrachloride is a cleaning chemical that causes liver damage if inhaled or swallowed.

d. Dyspepsia

- **How long have you had dyspepsia?**

Why: to determine if acute or chronic. Chronic dyspepsia is defined as occurring for more than 3 months.

- **What exactly do you mean by dyspepsia and how would you describe the discomfort? Dyspepsia or indigestion is a difficult, sometimes vague, symptom to define or evaluate. Dyspepsia is a discomfort related to eating which may include one or more of the following symptoms during or after the ingestion of food :- nausea, heartburn, regurgitation, upper abdominal discomfort, lower chest discomfort, acidity, sensation of fullness or unease in the upper abdomen, abdominal distention or excess wind e.g. A burning pain may suggest gastro-esophageal reflux; constricting pain may suggest angina, heart attack or esophageal spasm; deep gnawing pain may suggest peptic ulcer**
- **Can you point to exactly where the discomfort is and where it radiates to?**

Why: can help with diagnosis e.g. discomfort between the shoulder blades may suggest esophageal spasm, gall bladder disease or a duodenal ulcer; discomfort behind the sternum (breastbone) may suggest esophageal disorders or angina; discomfort in epigastrium (midline just below ribs) may suggest disorders of the biliary system, stomach or duodenum.

- **Is there anything that makes the discomfort worse?**

Why: e.g. eating food may aggravate a gastric ulcer; eating fried or fatty foods will aggravate biliary disease, esophageal disorders and functional dyspepsia (dyspepsia when no specific cause can be demonstrated); bending over will aggravate gastro-esophageal reflux; alcohol will aggravate gastro-esophageal reflux, oesophagitis, gastritis, peptic ulcer and pancreatitis.

- **Is there anything you have found that makes the discomfort better?**

Why: e.g. eating food may relive a duodenal ulcer.

- **What effect do food, milk and antacids have?**

Why: if discomfort is relieved by food and antacids may suggest duodenal ulcer, hiatus hernia and oesophagitis. If discomfort is brought on by food may suggest cholecystitis, gastric ulcer or reactions to toxins in food such as MSG or sulfites.

- **What effect do coffee, onions and garlic have?**
- **What effect does a big meal have?**
- **What effect does drinking alcohol have?**
- **What effect does exercise have?**

Why: may suggest angina as cause of discomfort if brought on by exertion.

- **Do fried or fatty foods make it worse?**
- **Do hot spicy foods effect it?**
- **Does the problem come on at night soon after you go to bed?**
- **Does it wake you at night?**
- **Does bending over**

Why: e.g. gardening make it worse?

- **Are you under a lot of stress or have a lot of worry?**

Why: may aggravate indigestion due to affecting motility.

- **Do you rush your meals?**

Why: may aggravate indigestion.

- **Do you chew your food properly?- if not, may aggravate indigestion**
- **Are you pregnant?**

Why: pregnancy increases the risk of indigestion due to a relaxation of the lower esophageal sphincter.

- **Associated symptoms**

✓ **Acid regurgitation?**
✓ **Why:** may suggest gastro-esophageal reflux, or oesophagitis.
✓ **Waterbrash (excess secretion of saliva into the mouth)?**
✓ **Why:** may suggest gastro-esophageal reflux, hiatus hernia or peptic ulcer.
✓ **Pain on swallowing?**
✓ **Why:** may suggest oesophagitis (especially if with hot and cold fluids) or stomach cancer.
✓ **Cough or wheeze at night? -may suggest gastro-esophageal reflux**
✓ **Symptoms of angina or heart attack?**
✓ **Why:** e.g. a common mistake is to attribute the discomfort of angina or a heart attack to a disorder of the gastro-intestinal tract. Must consider heartburn symptoms to be ischemic heart disease until proved otherwise.
✓ **Recent weight loss?**
✓ **Why:** may suggest stomach cancer, intestinal or mesenteric ischemia, pernicious anemia, chronic pancreatitis, chronic gastritis. Should also consider renal failure, cirrhosis of the liver and congestive heart failure.
✓ **Symptoms of heartburn?**
✓ **Why:** e.g. burning discomfort behind the sternum (breastbone) that radiates to the throat, associated with acid reflux, aggravated by heavy meals, swallowing hot and cold fluids, stooping, lying flat and lifting and straining, more likely to occur at rest than with exertion. Heartburn may be due to gastro-esophageal reflux, oesophagitis, hiatus hernia, peptic ulcer, scleroderma, pregnancy, obesity, smoking and alcohol, caffeine and some medications.
✓ **Symptoms of peptic ulcer?**
✓ **Why:** e.g. intermittent symptoms of gnawing or burning-type pain in the epigastrium (midline, under the ribs) which can be located by finger point, pain is worse before meals and relieved by taking antacids or food. Pain may waken the person at night.
✓ **Symptoms of chronic pancreatitis?**
✓ **Why:** e.g. deep boring upper abdominal pain, often radiating through to the back, fatty stools that float in toilet and are difficult to flush, possibly symptoms of diabetes.
✓ **Symptoms of gallstones?**
✓ **Why:** e.g. sudden onset of severe constant epigastric pain which may pass into the back. Symptoms are induced by a fatty meal.
✓ **Symptoms of anemia?**
✓ **Why:** e.g. tiredness, dizziness, muscle weakness, headache, shortness of breath on exertion - may suggest chronic oesophagitis, chronic gastritis, peptic ulcer or stomach cancer.
✓ **Symptoms of irritable bowel syndrome?**
✓ **Why:** e.g. alternating diarrhea and constipation, pellet-like stools, abdominal bloating, flatulence, belching.
✓ **Diarrhea 30 minutes after a meal?**
✓ **Why:** may suggest mesenteric ischemia.

- **Past medical history?**

Why: e.g. scleroderma (rare but important cause of oesophagitis), irritable bowel syndrome, gallstones, chronic pancreatitis, achalasia, hiatus hernia, pernicious anemia (may increase the risk of stomach cancer).

- **Medications?**

Why: e.g. non-steroidal anti-inflammatory medications (2-4 times the risk of gastric ulcers), anticholinergics, aspirin, calcium channel blockers, corticosteroids, digitalis, lipid lowering medications, narcotics, slow release potassium supplements, theophylline, tricyclic antidepressants and tetracycline - may all cause indigestion.

- **Nicotine smoking?**

Why: cigarette smoking is an important cause of indigestion.

- **Alcohol history?**

Why: alcohol is an important cause of dyspepsia both in the occasional drinker, especially red wine, with a large evening meal and in the problem drinker with alcoholic gastritis.

- **Family history?**

Why: e.g. peptic ulcers.

e. Bloody diarrhea

- **How long have you been having the bloody diarrhea?**

Why: to establish if acute or chronic.

- **What is the nature of the diarrhea?**

Why: e.g. large volume suggests small bowel disease; small volume suggests large bowel disease.

- **What is the frequency of the diarrhea?**
- **Is it severe bright red bleeding?**

Why: presence of severe rectal bleeding with diarrhea would suggest diverticulitis, colon cancer, amebic dysentery, bacillary dysentery.

- **Have you had any previous attacks?**

Why: may suggest inflammatory bowel disease.

- **Food intake in the last 72hrs?**

Why: may help differentiate between acute gastroenteritis and food poisoning.

- **Have any other people you know had the same problem recently, especially meal sharers**
- **Recent travel overseas?**

Why: e.g. less developed countries such as India - may suggest travelers diarrhea especially amoebiasis or Enterohemorrhagic E.Coli (EHEC).

- **Associated symptoms**

✓ **Mucous or pus**

✓ **Why:** would suggest ulcerative colitis, Crohn's disease, amebic dysentery or bacterial dysentery (e.g. shigella, salmonella, campylobacter jejuni, yersinia enterocolitica, enteroinvasive and enterohemorrhagic E.Coli).

✓ **Vomiting**

✓ **Why:** suggests gastroenteritis or food poisoning.

✓ **Abdominal pain?**

✓ **Why:** may suggest bacterial dysentery, amebic dysentery, ulcerative colitis, Crohn's disease or ischemic colitis. Central colicky abdominal pain indicates involvement of the small bowel e.g. gastroenteritis, while lower abdominal pain points to the large bowel e.g. inflammatory bowel disease.

✓ **Fever?**

✓ **Why:** may suggest bacterial dysentery, amebic dysentery, Crohn's disease, ulcerative colitis.

✓ **Weight loss?**

✓ **Why:** may suggest colon cancer, Crohn's disease.

✓ **Anal itch?**

✓ **Why:** diarrhea can causing anal irritation.

✓ **Other Symptoms of Inflammatory bowel disease e.g. painful joints, low back pain, eye problems, skin lesions**

✓ **Symptoms of iron deficiency anemia?**

✓ **Why:** e.g. lethargy, dizziness, depression, shortness of breath or angina

- **Past medical history?**

Why: e.g. ischemic colitis occurs in the setting of widespread peripheral vascular disease or cardiac disease.

- **Family history?**

Why: colon or rectal cancer; inflammatory bowel disease.

- **Have you taken or are you taking antibiotics?**

Why: may indicate Clostridium difficile infection as a complication of certain antibiotics.

f. Black stool

- **Explain the nature of the black stool?**

Why: to determine if true melena (black tarry sticky stool with strong odor) due to gastrointestinal hemorrhage or false melena due to ingestion of certain substances.

- **Associated symptoms**

✓ **Hematemesis (vomiting blood) or coffee-ground vomit (black dots like coffee grounds in vomit)**

✓ **Why:** suggests bleeding from the esophagus, stomach, duodenum e.g. esophageal varices, peptic ulcer, gastritis.

✓ **Fainting and sweating?**

✓ **Why:** may be signs of shock and thus indicate a sudden loss of blood volume.

✓ **Indigestion, heart burn or stomach pains recently?**

✓ **Why:** suggests peptic ulcer, gastoesophageal reflux, oesophagitis, gastritis, stomach cancer, mesenteric embolism or thrombosis or Meckel's diverticulum.

✓ **Symptoms of stomach cancer E.g. early satiety, loss of appetite, weight loss**

- **Past medical history?**

Why: causes of upper gastrointestinal bleeding e.g. peptic ulcer, reflux, oesophagitis, esophageal varices, stomach cancer, blood clotting disorders.

- **Medication?**

Why: oral iron therapy , bismuth-containing antacid tablets and charcoal ingestion can cause black colored stool and be confused with the black tarry stool due to gastrointestinal hemorrhage.

- **Aspirin, non-steroidal anti-inflammatories, anticoagulant therapy, reserpine, caffeine and high dose corticosteroids can increase risk of upper gastrointestinal bleeding**
- **Alcohol history?**

Why: Alcohol induced cirrhosis can increase the risk of peptic ulcers, gastro-esophageal varices.

- **Recent dietary history**

Why: some foods can cause black-colored stool and are not true melena e.g. red wine, licorice, beetroot.

g. Bloody stool

- **How long have you been having the bloody stool?**

Why: to establish if acute or chronic.

- **Is it severe?**

Why: presence of severe rectal bleeding would suggest angiodysplasia, ulcerative colitis, amebic dysentery, bacillary dysentery, intussusception, mesenteric thrombosis or embolism, diverticulitis, ischemic colitis and coagulation disorders. The site of the bleeding can be anywhere in the gastrointestinal tract since massive bleeding even from the stomach or duodenum may pass rapidly to rectum without becoming discolored to form melena (black tarry stool).

- **Is the bleeding mixed well with the stool?**

Why: suggests colon cancer, ulcerative colitis, Crohn's disease, Meckel's diverticulum, diverticulitis, large polyp and coagulation disorder. If blood is on the toilet paper only it suggests anal cause.

- **Is stool black and tarry? see black stool**

Why: usually due to bleeding from the upper gastrointestinal tract.

- **What is the color of the blood?**
- **Does the bloody stool only occur with menstruation?**

Why: suggests rectal endometriosis.

- **Associated symptoms**

✓ **Diarrhea and/or mucous**

✓ **Why:** would suggest ulcerative colitis, Crohn's disease, amebic dysentery or bacterial dysentery (e.g. shigella, salmonella, campylobacter jejuni, yersinia enterocolitica, enteroinvasive and enterohemorrhagic E.Coli).

✓ **Fever**

✓ **Why:** may suggest bacterial dysentery, amebic dysentery, chronic liver disease secondary to alcoholism, ulcerative colitis.

✓ **Symptoms of intestinal obstruction?**

✓ **Why:** e.g. colicky abdominal pain, vomiting, abdominal distension and absolute constipation - would suggest intussusception, mesenteric thrombosis, or embolism.

✓ **Painful bowel movements?**

✓ **Why:** anal fissure or thrombosed hemorrhoid.

✓ **Sensation of urgency or unsatisfied defecation?**

✓ **Why:** suggest a rectal cause.

✓ **Anal itch**

✓ **Why:** suggests hemorrhoids, fissure or diarrhea causing irritation.

✓ **Constipation**

✓ **Why:** may suggest hemorrhoids, anal fissure, diverticulitis, cancer of the rectum or left side of colon.

✓ **Symptoms of iron deficiency anemia?**

✓ **Why:** e.g. lethargy, dizziness, depression, shortness of breath or angina.

✓ **Symptoms of bleeding disorders**

✓ **Why:** e.g. easy bruising, bleeding gums, bleeding nose, blood in the urine, swollen painful joints.

- **Past medical history?**

Why: e.g. ischemic colitis occurs in the setting of widespread peripheral vascular disease or cardiac disease; bleeding disorders.

- **Family history?**

Why: colon or rectal cancer; bleeding disorders, inflammatory bowel disease.

- **Medications?**

Why: some medications can increase the risk of bleeding and bloody stools e.g. high dose aspirin, non-steroidal anti-inflammatory medication, certain antibiotics including clindomycin, gentamycin, erythromycin.

- **Alcohol history?**

Why: to establish risk of chronic liver disease and portal hypertension and resultant varices and hemorrhoids

h. Dark stool

- **How long have you had dark stools?**

Why: to determine if acute or chronic.

- **Explain the nature of the dark stool?**

Why: to determine if true melena (black tarry sticky stool with strong odor) due to gastrointestinal hemorrhage or false melena due to ingestion of certain substances.

- **Associated symptoms**

✓ **Hematemesis (vomiting blood) or coffee-ground vomit (black dots like coffee grounds in vomit)?**

✓ **Why:** suggests bleeding from the esophagus, stomach, duodenum e.g. esophageal varices, peptic ulcer, gastritis.

✓ **Fainting and sweating?**

✓ **Why:** may be signs of shock and thus indicate a sudden loss of blood volume.

✓ **Indigestion, heart burn or stomach pains recently?**

✓ **Why:** suggests peptic ulcer, gastoesophageal reflux, oesophagitis, gastritis, stomach cancer, mesenteric embolism or thrombosis or Meckel's diverticulum.

✓ **Symptoms of stomach cancer?**

✓ **Why:** e.g. early satiety, loss of appetite, weight loss

- **Past medical history?**

Why: causes of upper gastrointestinal bleeding e.g. peptic ulcer, reflux oesophagitis, esophageal varices, stomach cancer, blood clotting disorders.

- **Medication?**

Why: oral iron therapy , bismuth-containing antacid tablets and charcoal ingestion can cause dark colored stool and be confused with the black tarry stool due to gastrointestinal hemorrhage.

- **Aspirin, non-steroidal anti-inflammatories, anticoagulant therapy, reserpine, caffeine and high dose corticosteroids can increase risk of upper gastrointestinal bleeding**
- **Alcohol history?**

Why: Alcohol induced cirrhosis can increase the risk of peptic ulcers, gastro-esophageal varices.

- **Recent dietary history**

Why: some foods can cause dark-colored stool and are not true melena e.g. red wine, licorice, beetroot.

- **Family history?**

Why: e.g. bleeding disorders, peptic ulcer.

i. Regurgitation

- **How long have you had regurgitation?**

Why: to determine if acute or chronic.

- **What contents are regurgitated?**

Why: e.g. acid regurgitation describes the intermittent, sudden and spontaneous appearance of bitter tasting fluid in the mouth; food regurgitation refers to emitting already swallowed food or drink after eating. Note regurgitation is different to vomiting where the food is digested.

- **Is there anything that makes the regurgitation worse?**

Why: e.g. big meals, assumption of horizontal posture, belching, bending over.

- **Does the problem come on at night soon after you go to bed?**

Why: would suggest gastro-esophageal reflux.

- **Does it wake you at night?**

Why: may suggest gastro-esophageal reflux.

- **Does bending over (gardening) make it worse?**

Why: suggests gastro-esophageal reflux.

- **Associated symptoms**

✓ **Heartburn?**

✓ **Why:** typically heartburn is a burning discomfort behind the sternum (breastbone) that radiates to the throat, associated with acid reflux, aggravated by heavy meals, swallowing hot and cold fluids, stooping, lying flat and lifting and straining, more likely to occur at rest than with exertion. Heartburn associated with regurgitation may be due to gastro-esophageal reflux, reflux oesophagitis, hiatus hernia, peptic ulcer and scleroderma.

✓ **Waterbrash (excess secretion of saliva into the mouth)?**

✓ **Why:** may suggest gastro-esophageal reflux, hiatus hernia or peptic ulcer.

✓ **Cough?**

✓ **Why:** may suggest various complications of acid regurgitation. Some people complain of waking up episodically with the sensation of choking such that they will cough vigorously, but rarely produce any sputum, get out of bed and go to an open window to catch their breath. Other people may just describe a chronic dry cough without sudden exacerbations. Asthma may sometimes be precipitated by gastro-esophageal reflux.

✓ **Hoarseness of the voice?**

✓ **Why:** e.g. acid regurgitation may result in irritation of the larynx and cause hoarseness of the voice. Usually the acid regurgitation occurs at night, so hoarseness is most evident in the morning, and gradually settles as the day passes.

✓ **Waking up with a bad taste in the mouth?**

✓ **Why:** may be due to acid regurgitation at night.

✓ **Difficulty with swallowing both solids and liquids?**

✓ **Why:** consider achalasia, scleroderma or diffuse esophageal spasm.

✓ **Difficulty with swallowing solids only (nil difficulty with swallowing liquids)?**

✓ **Why:** suggests esophageal cancer until proven otherwise.

✓ **Significant weight loss?**

✓ **Why:** very often associated with advanced esophageal cancer, esophageal stricture or advanced achalasia. Should always be investigated.

✓ **Hand swelling and/or thickening and tightening of the skin of the fingers?**

✓ **Why:** may suggest scleroderma.

✓ **Symptoms of gastro-esophageal reflux?**

✓ **Why:** e.g. heartburn, aggravated by bending, stooping or lying down, relieved by antacids. May have pain with drinking hot liquids or alcohol. Regurgitation of food and acid into the mouth may occur, particularly when the person is bending or lying flat. May be associated with pregnancy, obesity, cigarette smoking, scleroderma, eating chocolate or fat, drinking coffee or alcohol.

✓ **Symptoms of esophageal cancer?**

✓ **Why:** e.g. progressive difficulty with swallowing; initially there is difficulty with swallowing solids, but eventually difficulty with swallowing liquids also occurs. Pain occurs if food gets stuck due to narrowing of the esophageal lumen. Weight loss occurs due to difficulty with swallowing and also due to reduced appetite.

✓ **Symptoms of achalasia?**

✓ **Why:** e.g. intermittent difficulty with swallowing both solids and liquids; regurgitation of food into mouth from the esophagus may occur, particularly at night; occasionally food may get stuck; drinking large quantities of fluids help force the food through if food gets stuck; severe pain behind the breastbone due to dysfunctional contraction of the esophagus; weight loss may occur but is usually not marked.

✓ **Symptoms of esophageal diverticulum?**

✓ **Why:** e.g. difficulty with swallowing, undigested food is regurgitated into the mouth, especially when the person is lying down. The person may have to manually massage the neck after eating to empty the sac. The person may also experience swelling of the neck, gurgling noises after eating, bad breath and a sour metallic taste in the mouth.

✓ **Symptoms of scleroderma?**

- ✓ **Why:** e.g. difficulty with swallowing, heartburn, hand swelling and/or thickening and tightening of the skin of the fingers, Raynaud's phenomenon.

- **Past medical history?**

Why: e.g. gastro-esophageal reflux may be associated with scleroderma, pregnancy or obesity.

- **Medications?**

Why: e.g. non-steroidal anti-inflammatory medications (2-4 times the risk of gastric ulcers), anticholinergics, aspirin, calcium channel blockers, corticosteroids, digitalis, lipid lowering medications, narcotics, slow release potassium supplements, theophylline, tricyclic antidepressants and tetracycline - may all cause gastro-esophageal reflux.

- **Nicotine smoking?**

Why: Cigarette smoking is an important cause of reducing the pressure of the lower esophageal pressure and thus increasing the risk of gastro-esophageal reflux. Cigarette smoking also increases the risk of esophageal cancer.

- **Alcohol history?**

Why: Alcohol is an important cause of reducing the pressure of the lower esophageal pressure and thus increasing the risk of gastro-esophageal reflux. Alcohol also increases the risk of esophageal cancer

j. Enlarged liver

- **Do you, or have you ever owned a dog as a pet?**

Why: may indicate increased risk of hydatid disease. Hydatid disease occurs when humans ingest the embryos of the dog tapeworm which may occur with direct contact with infected dogs or by eating uncooked, improperly washed vegetables contaminated with infected canine feces.

- **Risk factors for viral hepatitis?**

Why: e.g. African or Far eastern country of origin, recent consumption of shellfish (may suggest hepatitis A), intravenous drug use, tattoos, recent travel to areas with increased risk of hepatitis A, needle stick injury.

- **Associated symptoms**
  - ✓ **Abdominal pain?**
  - ✓ **Why:** may suggest biliary obstruction due to gallstones but any cause of enlarged liver may cause abdominal pain due to distention of the liver capsule.
  - ✓ **Jaundice (yellow skin and sclera)?**
  - ✓ **Why:** may suggest hemolytic anemia; toxic or infectious hepatitis; bile duct obstruction due to gallstones, carcinoma of the pancreas or ampulla of Vater; or biliary cirrhosis.
  - ✓ **Fever?**
  - ✓ **Why:** may suggest viral hepatitis, infectious mononucleosis, ascending cholangitis, and other infectious diseases.
  - ✓ **Gross weight loss?**
  - ✓ **Why:** often suggests cancer (e.g. metastases, liver cancer, leukemia, lymphoma, cancer of the pancreas or bile ducts).
  - ✓ **Symptoms of primary liver cancer (hepatocellular cancer)?**
  - ✓ **Why:** e.g. weight loss, loss of appetite, fever, ache in the right upper abdomen, swollen abdomen.
  - ✓ **Symptoms of right heart failure?**
  - ✓ **Why:** e.g. fatigue, shortness of breath, loss of appetite, nausea, swollen ankles, swollen abdomen and symptoms of left heart failure (unable to lie flat in bed due to breathlessness).
  - ✓ **Symptoms of hemochromatosis?**

- ✓ **Why:** e.g. bronze pigmentation, fatigue, loss of libido, painful joints, symptoms of diabetes, symptoms of congestive cardiac failure.
- ✓ **Symptoms of hydatid disease of the liver?**
- ✓ **Why:** e.g. jaundice (yellow skin), abdominal pain, fever.
- ✓ **Symptoms of viral hepatitis?**
- ✓ **Why:** e.g. feel unwell with nausea, vomiting, diarrhea, loss of appetite, headaches, distaste for cigarettes, mild fever, mild abdominal discomfort, jaundice, dark urine, pale colored stools, may develop a rash and painful joints.

- **Past medical history?**

Why: e.g. primary biliary cirrhosis may be associated with Sjogren's syndrome, scleroderma, rheumatoid arthritis; primary liver cancer is associated with Hepatitis B and C, alcoholic cirrhosis and hemochromatosis; liver metastases most commonly originate from breast, lung and colon cancer; right heart failure may be caused by left heart failure, chronic lung disease, pulmonary embolism or valvular heart disease secondary to previous rheumatic fever..

- **Alcohol history?**

Why: will indicate risk of alcohol hepatitis.

- **History of injecting drug use?**

Why: may indicate risk of Hepatitis B, Hepatitis C and HIV.

- **Family history?**

Why: e.g. hemochromatosis.

3. Urinary symptoms

a. Proteinuria

- **When was the proteinuria (excessive protein excreted in urine) discovered?**
- **Is the patient a child and has suffered a Streptococcal infection**

Why: (e.g. tonsillitis, pharyngitis, middle ear infection or cellulitis) 1-3 weeks before the onset of the proteinuria? - suggests post streptococcal glomerulonephritis. Hemolytic uremic syndrome is a disorder of infancy and childhood that follows a febrile illness, particularly gastroenteritis or an upper respiratory tract infection.

- **Are you pregnant?**

Why: may suggest pregnancy induced hypertension, pre-eclampsia or eclampsia. Any person with systemic lupus erythematosus who gets pregnant is at risk of rapidly progressive glomerulonephritis.

- **Have you had an injury such as a blow to the loin?**

Why: Trauma to the kidneys may cause proteinuria.

- **Associated symptoms**

- ✓ **Fever?**
  - **Why:** Temperature may suggest urinary tract infection or lupus erythematosus. A fever itself may also cause proteinuria.
- ✓ **Butterfly shaped facial rash?**
  - **Why:** suggests systemic lupus erythematosus.
- ✓ **Coughing up blood?**
  - **Why:** if associated with protein in the urine may suggest Goodpastures syndrome.
- ✓ **Abdominal pain?**

- **Why:** may suggest renal stones, kidney contusion (bruising from trauma), kidney laceration, glomerulonephritis, renal cancer or polycystic kidneys.

✓ **Symptoms of nephrotic syndrome?**

- **Why:** e.g. swelling of the ankles and legs, swelling of the abdomen, face and arms may also be present (especially in children). Swelling of the genitals is sometimes seen.

✓ **Symptoms of Diabetes mellitus?**

- **Why:** e.g. frequency of urination, excessive thirst, weight loss (especially in Type 1 Diabetes mellitus), tiredness, fatigue, increased infections especially of the skin and genitals, blurry vision.

✓ **Symptoms of lupus erythematosus?**

- **Why:** e.g fever, malaise, tiredness, Raynaud's syndrome, butterfly shaped facial rash. Systemic lupus erythematosus may be complicated by protein in the urine.

✓ **Symptoms of urinary tract infection?**

- **Why:** e.g. pain and burning with urination, urinary frequency, blood in urine in severe cases, offensive smell to urine.

✓ **Symptoms of chronic renal failure?**

- **Why:** The early stages of renal failure are often completely without symptoms. Later symptoms may include tiredness, loss of appetite, insomnia, frequency of urination, itch, nausea, vomiting and restless legs

▪ **Past medical history?**

Why: e.g. diabetes, amyloidosis, systemic lupus erythematosus, systemic sclerosis, multiple myeloma, congestive cardiac failure, high blood pressure.

▪ **Medications?**

Why: Many drugs can cause proteinuria including penicillamine and gold.

▪ **Allergies?**

Why: may suggest minimal change disease of the kidneys. Reactions to many allergens such as poison ivy, pollens, bee stings and cows milk may be associated with nephrotic syndrome.

▪ **Family history?**

Why: e.g. history of renal disease or allergy may suggest minimal change disease of the kidneys; diabetes mellitus; high blood pressure.

▪ **Travel history?**

Why: may assess risk of yellow fever, typhoid fever.

6. *Polyuria*

▪ **How long have you had Polyuria (the passing of excessive volumes of urine)?**

Why: to determine if acute or chronic.

▪ **How many times would you pass urine per day?**

▪ **How many times would you pass urine at night?**

▪ **Is the quantity of urine passed per time large or small?**

Why: it is important to clarify whether the problem is true Polyuria (frequent trips to the bathroom with excessive urination production) or frequent attempts to urinate with only reduced urine output (i.e. small amounts of urine). Frequent small amounts of urine is not classed as Polyuria and is due to different causes. (see frequency of urine).

▪ **If the quantity of urine passed per time is large, is the quantity massive?**

Why: Massive Polyuria is usually due to diabetes insipidus, diabetes mellitus (especially insulin dependent diabetes mellitus) or psychogenic polydipsia (drinking excessive amounts of fluids). Mild Polyuria would suggest chronic nephritis, renal tubular acidosis, hyperparathyroidism, Fanconi's syndrome and mild diabetes mellitus.

▪ **Is it transient?**

Why: may suggest migraine, asthma and drugs such as diuretics.

▪ **How much fluid would you drink per day?**

Why: can help determine hydration status, detect excessive thirst in diabetes mellitus and insipidus and also detect habitual overdrinking of fluids.

- **What is the colour of the urine?**

Why: e.g. cloudy, clear or blood stained.

- **Risk factors for Type 2 diabetes mellitus?**

Why: e.g. previous impaired glucose tolerance or impaired fasting glycemia test; Aboriginal and Torres strait Islanders aged 35 years and over; certain high risk non- English speaking background groups aged 35 years and over (such as Pacific Islanders, Indian subcontinent, Chinese); people aged 45 years and over who have one of more of the following risk factors including obesity with BMI of greater or equal to 30, high blood pressure or first degree relative with Type 2 diabetes; previous heart attack, angina or stroke; previous gestational diabetes; obese women with polycystic ovarian syndrome.

- **Associated symptoms**

✓ **Excessive appetite and thirst?**
  - **Why:** may suggest diabetes mellitus or hyperthyroidism.

✓ **Excessive thirst, without excessive appetite?**
  - **Why:** may suggest diabetes insipidus and psychogenic polydipsia (drinking excessive amounts of fluids).

✓ **Symptoms of Diabetes mellitus?**
  - **Why:** e.g. frequency of urination, excessive thirst, weight loss, fatigue, increased infections.

✓ **Symptoms of Diabetes insipidus?**
  - **Why:** e.g. frequency of urination, large quantities of urine produced; need to urinate at night, excessive thirst, dehydration.

✓ **Symptoms of chronic nephritis?**
  - **Why:** e.g. Polyuria (excessive urination), nocturia (urination at night), sometimes blood in the urine.

✓ **Symptoms of complications of Diabetes mellitus?**
  - **Why:** e.g. staphylococcal skin infections, tingling or numbness of the feet, impotence, heart attack, intermittent claudication due to peripheral vascular disease - these complications may be the presenting features of diabetes.

✓ **Symptoms of hyperthyroidism?**
  - **Why:** e.g. palpitations, increased heart rate, preference for cooler weather, increased appetite, weight loss, increased sweating, tremor, nervousness, irritability, diarrhea, lack of menstrual periods, frequent urination.

✓ **Symptoms of hyperparathyroidism?**
  - **Why:** e.g. bone pain, loin pain and blood in urine (from kidney stones), constipation, abdominal pain, depressed mood. May also present with Polyuria and nocturia.

- **Past medical history?**

Why: e.g. diabetes insipidus may be associated with pituitary tumor, hypothalamic tumor, brain metastasis, leukemia, tuberculosis, meningitis, sarcoidosis, base of skull fracture, brain hemorrhage, renal tubular acidosis; chronic nephritis may be caused by chronic pyelonephritis (kidney urinary tract infection), diabetes, sickle cell disease and lead poisoning; polycystic ovarian syndrome, cirrhosis, cystic fibrosis, chronic pancreatitis, hemochromatosis, pancreatic cancer, Cushing's syndrome, Acromegaly, thyrotoxicosis, phaeochromocytoma, Friedreich's ataxia, myotonic dystrophy - are all conditions which can cause diabetes mellitus; hypercalcaemia (elevated levels of calcium) may cause Polyuria and may be caused by bone metastases, multiple myeloma, sarcoidosis, hyperthyroidism or hyperparathyroidism.

- **Medications?**

Why: diuretics may cause transient passing of large amounts of urine; some medications can cause diabetes insipidus such as lithium, glibenclamide; non-steroidal anti-inflammatory medications may cause chronic nephritis.

- **Past surgical history?**

Why: e.g. hypothalamic-pituitary surgery is the most common cause of diabetes insipidus; pancreatectomy (removal of the pancreas) may cause diabetes mellitus.

- **Caffeine intake?**

Why: excessive caffeine intake may cause frequent urination because it has a diuretic action.

- **Alcohol use?**

Why: alcohol also has a diuretic action.

- **Family history?**

Why: e.g. type 1 or 2 diabetes mellitus.

c. *Frequent urination*

- **How long have you had frequent urination?**

Why: to determine if acute or chronic.

- **How many times would you pass urine per day?**

Why: to gauge severity.

- **How many times would you pass urine at night?**
- **Is the quantity of urine passed per time large or small?**

Why: it is important to clarify whether "frequent urination" means true frequent trips to the bathroom with excessive urination (output of a large amount of urine leading to frequent urination) or frequent attempts to urinate with only reduced urine output (i.e. small amounts of urine).

- **How much fluid would you drink per day?**

Why: can help determine hydration status, detect excessive thirst in diabetes mellitus and insipidus and also detect habitual overdrinking.

- **What is the colour of the urine?**

Why: e.g. cloudy, clear or blood stained.

- **Associated symptoms**

✓ **Painful urination?**
  - **Why:** If painful urination and frequent small amounts of urine must consider cystitis, urethritis, prostatitis, bladder stones and tuberculosis of the bladder. If painless urination of frequent small amounts of urine consider prostatic hypertrophy, urethral stricture or spastic neurogenic bladder.

✓ **Fever?**
  - **Why:** consider pyelonephritis.

✓ **Excessive appetite and thirst?**
  - **Why:** may suggest diabetes mellitus or hyperthyroidism.

✓ **Symptoms of urinary tract infection?**
  - **Why:** e.g. pain and burning with urination, urinary frequency, blood in urine in severe cases, offensive smell to urine.

✓ **Symptoms of pyelonephritis (acute bacterial infection of the kidney)**
  - **Why:** e.g. symptoms as for urinary tract loin and also loin pain, fever, chills, nausea.

✓ **Symptoms of prostatitis?**
  - **Why:** e.g. fever, chills, pain between anus and base of penis, urinary frequency, urgency and pain with urination, sometimes blood in the urine.

✓ **Symptoms of urinary stones?**
  - **Why:** e.g. intense pain in loin radiating down to groin, cloudy urine due to blood in the urine.

✓ **Symptoms of urethritis?**
  - **Why:** e.g. burning sensation with passing urine, penile discharge or leakage.

✓ **May be due to gonorrhea, chlamydia, ureaplasma and other organisms**

✓ **Symptoms of Diabetes mellitus?**
  - **Why:** e.g. frequency of urination, excessive thirst, weight loss, fatigue, increased infections.

✓ **Symptoms of Diabetes insipidus?**

- **Why:** e.g. frequency of urination, large quantities of urine produced, need to urinate at night, excessive thirst, dehydration.

✓ **Symptoms of Benign prostatic hyperplasia (benign enlargement of the prostate)?**
- **Why:** e.g. frequency of urination, urgency, need to pass urine at night, hesitancy of urination, slow interrupted flow, terminal dribbling of urine, acute retention of urine.

✓ **Symptoms of prostate cancer**
- **Why:** e.g. may be without symptoms; be similar to symptoms of Benign prostatic hypertrophy or also include bone pain from metastases, tiredness, weight loss and perineal pain.

▪ **Pregnant?**

Why: pregnant women have a higher chance of urinary tract infections and it is important to treat them as they can lead to pyelonephritis and higher chance of developing high blood pressure in pregnancy and higher chance of delivering a low birth weight baby.

▪ **Caffeine intake?**

Why: excessive caffeine intake may cause frequent urination because it has a diuretic action.

▪ **Alcohol use?**

Why: alcohol also has a diuretic action.

▪ **Medications?**

Why: diuretics may cause transient passing of large amounts of urine; some medications can cause diabetes insipidus such as lithium, glibenclamide.

▪ **Past surgical history?**

Why: e.g. hypothalamic-pituitary surgery is the most common cause of diabetes insipidus.

▪ **Sexual history?**

Why: may help in assessing risk of sexually acquired urethritis

d. Cloudy urine

▪ **How long have you had cloudy urine?**

Why: to determine if acute or chronic.

▪ **Have you had previous episodes of cloudy urine or diagnosed urinary tract infection?**

Why: may indicate recurrent urinary tract infections due to relapse of a previously treated infection or because of re-infection.

▪ **Is the cloudy urine persistent despite being treated with antibiotics?**

Why: may indicate that the bacteria is resistant to the antibiotic or that there is an underlying abnormality such as a kidney stone or chronically infected prostate in a male patient.

▪ **Age of the patient?**

Why: if neonate or preschool age child must investigate for vesicoureteric reflux if urinary tract infection is diagnosed as it can lead to scarring of kidneys, high blood pressure and chronic renal failure. Urinary tract infections in infants and very young children may be associated with fever, vomiting, diarrhea and failure to thrive.

▪ **Associated symptoms**

✓ **Symptoms of urinary tract infection?**
- **Why:** e.g. pain and burning with urination, urinary frequency, blood in urine in severe cases, offensive smell to urine.

✓ **Symptoms of pyelonephritis (acute bacterial infection of the kidney) e.g. symptoms as for urinary tract loin and also loin pain, fever, chills, nausea**

✓ **Blood in urine?**
- **Why:** see blood in urine, any blood in the urine may lead to cloudy or smoky urine.

✓ **Symptoms of prostatitis?**
- **Why:** e.g. fever, chills, pain between anus and base of penis, urinary frequency, urgency and pain with urination, sometimes blood in the urine.

✓ **Symptoms of urinary stones?**

- **Why:** e.g. intense pain in loin radiating down to groin, cloudy urine due to blood in the urine.

✓ **Symptoms of urethritis?**
- **Why:** e.g. burning sensation with passing urine, penile discharge or leakage.

✓ **May be due to gonorrhea, chlamydia, ureaplasma and other organisms**

✓ **Vaginal discharge?**
- **Why:** due to vaginitis or physiological discharge may cause cloudy urine due to contamination.

- **Sex of patient?**

Why: if male should investigate for chronic prostatitis.

- **Pregnant?**

Why: pregnant women have a higher chance of urinary tract infections and it is important to treat them as they can lead to pyelonephritis and higher chance of developing high blood pressure in pregnancy and higher chance of delivering a low birth weight baby.

- **Travel history?**

Why: may assess risk of bilharzia infection.

- **Sexual history?**

Why: may help in assessing risk of sexually acquired urethritis

e. *Red urine*

- **How long have you had the red urine?**

Why: can determine if acute or chronic.

- **Is the discoloration of the urine truly red?**

Why: Red urine usually indicates blood in the urine. Jaundice more typically causes dark brown urine.

- **Does the red urine occur in the first or the terminal part of the urine stream?**

Why: Redness in the first part of the urine stream suggests blood in the urine from a urethral or Prostatic lesion, while redness in the terminal part of the urine stream suggests bleeding from the bladder. Redness throughout the entire urine stream has no localizing features.

- **Have you had an injury such as a blow to the loin, pelvis or genital area?**
- **Is the red urine transient or constant?**

Why: e.g. joggers and athletes engaged in very vigorous exercise can develop transient blood in the urine.

- **Age of the patient?**

Why: if neonate or preschool age child must investigate for vesicoureteric reflux if urinary tract infection is diagnosed as it can lead to scarring of kidneys, high blood pressure and chronic renal failure. Urinary tract infections in infants and very young children may be associated with fever, vomiting, diarrhea and failure to thrive.

- **Sex of patient?**

Why: if male should investigate for chronic prostatitis.

- **Pregnant?**

Why: pregnant women have a higher chance of urinary tract infections and it is important to treat them as they can lead to pyelonephritis and higher chance of developing high blood pressure in pregnancy and higher chance of delivering a low birth weight baby.

- **Associated symptoms**

✓ **Abdominal pain?**
- **Why:** associated with blood in the urine suggests renal stones (most likely), renal embolism, kidney contusion (bruising from trauma), kidney laceration, glomerulonephritis, renal cancer or polycystic kidneys. If abdominal pain is assoeiated with jaundice, this suggests common duct stones, sclerosing cholangitis, pancreatic cancer, bile duct cancer, pancreatitis, viral or alcoholic hepatitis.

- ✓ **Pain or burning with urination or frequency of urination?**
  - **Why:** suggests a bladder stone, prostatic disease, urinary tract infection or renal infarction. If blood in the urine is painless, this may suggest urinary tract infection or trauma, tumors or polycystic kidneys.
- ✓ **Fever?**
  - **Why:** associated with blood in the urine suggests pyelonephritis (most likely), lupus erythematosus, infective endocarditis with emboli to kidneys. Fever associated with jaundice may suggest cholangitis, viral hepatitis, pancreatitis or severe alcoholic hepatitis.
- ✓ **Dark urine and Pale stools?**
  - **Why:** occurs with obstructive or cholestatic type jaundice such as gallstones, cancer of the pancreas, cancer of the bile duct, strictures of the bile duct, some medications, recurrent jaundice of pregnancy.
- ✓ **Symptoms of urinary tract infection?**
  - **Why:** e.g. pain and burning with urination, urinary frequency, blood in urine in severe cases, offensive smell to urine.
- ✓ **Symptoms of pyelonephritis (acute bacterial infection of the kidney)**
  - **Why:** e.g. symptoms as for urinary tract loin and also loin pain, fever, chills, nausea.
- ✓ **Symptoms of prostatic disease?**
  - **Why:** e.g. slow weak urine stream, terminal dribbling of urine - may suggest cause of red urine is blood from the rupture of enlarged prostatic veins due to prostatic enlargement.
- ✓ **Symptoms of urinary stones?**
  - **Why:** e.g. intense pain in loin radiating down to groin, cloudy urine due to blood in the urine.
- ✓ **Symptoms of urethritis?**
  - **Why:** e.g. burning sensation with passing urine, penile discharge or leakage may be due to gonorrhea, chlamydia, ureaplasma and other organisms.
- ✓ **Symptoms of bleeding disorders**
  - **Why:** e.g. extensive skin bruising, bleeding gums, bleeding nose, heavy menstrual periods, rectal bleeding and painful swollen joints.
- ✓ **Symptoms of lupus erythematosus?**
  - **Why:** e.g. fever, malaise, tiredness, Raynaud's syndrome, butterfly shaped facial rash.
- ✓ **Symptoms of leukemia?**
  - **Why:** Symptoms of anemia, malaise, susceptibility to infections (such as sore throat, mouth ulceration and chest infections), easy bruising, gum enlargement.

- **Past medical history?**

Why: e.g. some medical conditions may cause jaundice including hemolytic anemia, gallstones, cancer of the pancreas, cancer of the bile duct, strictures of the bile duct, hepatitis, cirrhosis of the liver and congestive cardiac failure.

- **Past history of kidney disease?**
- **Past Radiation therapy?**

Why: Radiation cystitis can cause massive blood in the urine.

- **Medications?**

Why: e.g. anticoagulants (such as warfarin) and cyclophosphamide may cause blood in the urine; many medications may cause jaundice including isoniazid, methyldopa, halothane, ketoconazole, niacin, nitrofurantoin, disulfiram, rifampin, testosterone, propylthiouracil, oral contraceptives, mercury.

- **Sexual history?**

Why: To determine risk of sexually acquired urethritis which may cause blood in the urine. Will also determine risk of hepatitis B infection that can cause jaundice.

- **Intravenous drug use?**

Why: increase the risk of hepatitis B and hepatitis C infection that can cause jaundice and dark urine.

- **Dietary history?**

Why: Large amounts of beetroot, red lollies or berries in diet can cause red discoloration of urine.

- **Travel history?**

Why: Recent overseas travel may suggest bilharzias or other parasites.

f. Blood in urine

- **How long have you had blood in the urine?**

Why: can determine if acute or chronic.

- **Does the blood in the urine occur in the first or the terminal part of the urine stream?**

Why: blood in the first part of the urine stream suggests a urethral or Prostatic lesion , while blood in the terminal part of the urine stream suggests bleeding from the bladder. Uniform bleeding has no localizing features.

- **Have you had an injury such as a blow to the loin, pelvis or genital area?**
- **Is the blood in the urine transient or constant?**

Why: e.g. joggers and athletes engaged in very vigorous exercise can develop transient blood in the urine.

- **Associated symptoms**

✓ **Abdominal pain**
  - **Why:** renal stones (most likely), renal embolism, kidney contusion (bruising from trauma), kidney laceration, glomerulonephritis, renal cancer or polycystic kidneys.

✓ **Pain or burning with urination or frequency of urination?**
  - **Why:** suggests a bladder stone, prostatic disease, urinary tract infection or renal infarction. If painless blood in the urine can suggest urinary tract infection or trauma, tumors or polycystic kidneys.

✓ **Fever**
  - **Why:** suggests pyelonephritis (most likely), lupus erythematosus, infective endocarditis with emboli to kidneys.

✓ **Symptoms of prostatic disease**
  - **Why:** e.g. slow weak urine stream, terminal dribbling of urine - may suggest cause of blood in urine is from rupture of enlarged prostatic veins due to prostatic enlargement.

✓ **Symptoms of bleeding disorders**
  - **Why:** e.g. extensive skin bruising, bleeding gums, bleeding nose, heavy menstrual periods, rectal bleeding and painful swollen joints.

✓ **Symptoms of lupus erythematosus**
  - **Why:** E.g fever, malaise, tiredness, Raynaud's syndrome, butterfly shaped facial rash.

✓ **Symptoms of leukemia**
  - **Why:** symptoms of anemia, malaise, susceptibility to infections (such as sore throat, mouth ulceration and chest infections), easy bruising, gum enlargement.

- **Past history of kidney disease?**
- **Past Radiation therapy?**

Why: radiation cystitis can cause massive blood in the urine.

- **Sexual history?**

Why: to determine risk of sexually acquired urethritis.

- **Dietary history?**

Why: large amounts of beetroot, red lollies or berries in diet can cause red discoloration of urine.

- **Travel history?**

Why: recent overseas travel may suggest bilharzias or other parasites.

- **Medications?**

Why: anticoagulants, cyclophosphamide.

4. Miscellanies

a. Appetite changes

- **Can you tell me how exactly your appetite has changed?**

Why: This is a an important way for you to tell your Health Professional exactly what has been occurring and which has ultimately resulted in you presenting today.

- **When did you first notice that your appetite had changed or was changing?**

Why: The period of time that you have been experiencing your symptoms can give an indication of the underlying cause.

- **How did you notice that your appetite had changed, or was changing?**

Why: It may be important for you to mention whether or not you noticed the change, or if someone else noticed it.

- **Have you noticed that you have lost weight as your appetite has increased?**

Why: This can occur in thyrotoxicosis, hyperthyroidism, gastrointestinal malabsorption or diabetes mellitus.

- **Have you found that you have gained weight as you appetite has increased?**

Why: This can occur in Cushing's Syndrome, hypoglycemia, or with diseases of the hypothalamus. Additionally, it is important to mention that this may have occurred as a result of your eating and lifestyle habits as opposed to the presence of a disease state.

- **Have you lost weight at the same time as your appetite has decreased?**

Why: This may happen with anorexia nervosa, adrenal insufficiency/Addison's disease, gastrointestinal disease, or with a wide variety of cancers/malignancies.

- **Have you found that you have gained weight as your appetite has decreased?**

Why: This may occur in hypothyroidism.

- **Do you smoke cigarettes or have any liver disease?**

Why: Liver disease can alter your sense of taste, and so alter your appetite. An important indication of this is that the disturbance of taste experienced with liver disease (e.g. hepatitis, jaundice) may cause a smoker to give it up. If you have recently given up smoking then this is important to mention.

- **Do you take any illicit drugs?**

Why: Some drugs such as narcotics (e.g., heroin, cocaine) or amphetamines (speed) can cause you to lose your appetite/ Some others such as marijuana may change or increase your appetite.

- **Have you been deliberately trying to change your weight or appetite recently?**

Why: Your change in appetite and/or weight may be the result of you wanting to change it. For instance, you may have tried a new diet or you may be exercising more. Some may take this to an extreme level and may display signs of anorexia nervosa.

- **Do you have a fear of being or becoming overweight?**

Why: This can be a sign of anorexia nervosa which may also cause a disturbance of appetite.

- **How do you think you look, and how do you feel about that?**

Why: Those with anorexia nervosa have a disturbed and distorted view of themselves, and may experience change in appetite.

- **Can you tell me about your menstrual cycles?**

Why: For women of reproductive age, conditions such as anorexia nervosa can cause them to stop menstruating. This is an objective and important way for your health professional to assess why you have had a change in appetite.

- **Can you tell me about your usual diet?**

Why: This may form a "baseline" from which your health professional can assess your appetite disturbance.

- **Do you ever binge eat?**

Why: Binge eating can occur in bulimia and can cause appetite disturbance.

- **Do you ever feel that you are not in control of your eating habits?**

Why: A subjective feeling of "loss of control" over the appetite may occur in those with an eating disorder such as bulimia.

- **Can you tell me about your exercise regimen?**

Why: Whilst exercise is a healthy thing to partake in, sometimes it can be taken to the extreme. Those with bulimia may exercise excessively and cause appetite changes. Large amounts of exercise can result in the feeling that your appetite has changed as well.

- **Can you tell me about your lifestyle and what things have been happening in your life?**

Why: Your appetite may have changed due to things which are occurring in your life, or perhaps as a result of a lack of easy access to foodstuffs.

- **How have you been feeling lately?**

Why: Your appetite may have changed as a result of a psychological condition, and this question is a good way for your Health Professional to open the door for you to tell them that.

- **Have you ever suffered from, or are you currently suffering from depression?**

Why: Depression is a condition which can cause changes to your appetite, both eating more and eating less.

- **Have you ever been diagnosed with bipolar affective disorder?**

Why: This is a psychiatric condition typified by interspersed episodes of depression and mania. In some cases it may cause changes to your appetite.

- **Have you recently suffered any bereavement?**

Why: The death of someone in your life can cause you to experience bereavement, and this in turn can cause appetite changes.

- **Do you consume alcohol, and if so how much?**

Why: Excessive and long term consumption of alcohol (alcoholism) can result in changes to your weight and appetite.

- **Has your sense of taste or smell changed at all recently?**

Why: Your appetite may have changed as a result of a change in your sense of taste or smell. Taste and smell are intimately intertwined and any change in them can affect your appetite.

- **Have you been unwell recently?**

Why: General illness can cause a decrease in appetite.

- **Is there a family history of diabetes or thyroid disease? Both conditions can affect appetite**
- **How much caffeine do you drink?**

Why: Caffeine can suppress your appetite.

- **Do you have any abdominal pain, diarrhea, constipation or abdominal bloating? Or have you ever been diagnosed with an Inflammatory bowel disease?**

Why: Inflammatory bowel disease can result in a decrease in appetite.

- **Have you noticed any heat or cold intolerance, increased sweating, palpitations, fatigue or increased energy?**

Why: These questions are directed at thyroid function. Your thyroid gland has an important role in appetite.

6. Poor appetite

- **How long have you had the poor appetite?**

Why: to determine if acute or chronic. Acute poor appetite would most likely be due to an acute febrile disease or acute psychiatric illness.

- **What are your stressors at the moment?**

Why: questions specifically about relationship, family, children, social support, occupation, general physical health and financial stresses. Emotional stress may lead to either under eating or over eating.

- **Can you think of any reason why you have poor appetite?**

Why: e.g. severe loss, such as the death of a loved one, marital separation or financial loss. Emotional upset, grief, loss and relationship problems may cause poor appetite and under eating.

- **Associated symptoms**

✓ **Weight loss?**
  - **Why:** Weight loss usually accompanies poor appetite if the reduction in appetite is prolonged. Significant weight loss may suggest stomach cancer, intestinal or mesenteric ischemia, chronic pancreatitis, chronic gastritis, renal failure and congestive heart failure.

✓ **Fever?**
  - **Why:** Any fever may cause a temporary loss of appetite. A prolonged fever may affect appetite long enough to cause weight loss. A fever may suggest a localized abdominal condition (e.g. cholecystitis, acute appendicitis) or a systemic condition (e.g. tuberculosis, brucellosis, yellow fever).

✓ **Pain with swallowing?**
  - **Why:** Most causes of painful swallowing will also cause difficulty with swallowing. Painful swallowing can lead to people and especially children to try not to eat. If painful swallowing is present without any real difficulty with swallowing must consider Candida infection, herpes simplex infection or medication induced ulceration of the esophagus (e.g. from emepronium or slow release potassium tablets that may lodge in the gullet when swallowed lying down or without water).

✓ **Difficulty with swallowing solids only (nil difficulty with swallowing liquids)?**
  - **Why:** suggests esophageal cancer until proven otherwise.

✓ **Difficulty with swallowing both solids and liquids?**
  - **Why:** consider achalasia, scleroderma or diffuse esophageal spasm.

✓ **Heartburn?**
  - **Why:** should consider a diagnosis of reflux oesophagitis with or without a hiatus hernia, peptic ulcer, achalasia, diffuse esophageal spasm or advanced esophageal cancer.

✓ **Abdominal pain or discomfort, if so can you point to exactly where the discomfort is and where it radiates to?**
  - **Why:** must consider acute cholecystitis (inflammation of the gallbladder usually due to obstruction from a gallstone), peptic ulcer, acute appendicitis, pyelonephritis (bacterial infection of the kidney), pancreatitis, renal stones and peritonitis.

✓ **Jaundice?**
  - **Why:** may suggest pancreatic cancer, liver metastases, cancer of the bile ducts.

✓ **Chronic cough?**
  - **Why:** may suggest tuberculosis or lung cancer.

✓ **Diarrhea?**
  - **Why:** may suggest gastroenteritis, Crohn's disease.

✓ **Symptoms of stomach cancer?**
  - **Why:** e.g. early feeling of fullness after eating, indigestion, loss of appetite, weight loss, vomiting (if cancer causes stomach outlet obstruction), difficulty with swallowing (if cancer occurs at opening to stomach).

✓ **Symptoms of Diabetes mellitus?**
  - **Why:** e.g. frequency of urination, excessive thirst, weight loss, fatigue, increased infections. May be complicated by gastroparesis which causes delayed emptying of the stomach, a feeling of fullness and poor appetite.

✓ **Symptoms of ovarian cancer?**
  - **Why:** e.g. symptoms at presentation are usually nonspecific and usually include abdominal pain, increasing abdominal girth and abnormal menstrual bleeding. Ovarian cancer may also cause reduced appetite and an early feeling of fullness after eating due to pressure on the stomach.

✓ **Symptoms of liver cancer?**
  - **Why:** e.g. weight loss, reduced appetite, fever, ache over the right upper abdomen, abdominal swelling and an early feeling of fullness after eating.

- ✓ **Symptoms of gallstones?**
  - **Why:** e.g. gradual onset of severe constant right upper abdominal pain which may pass into the back. It can be associated with reduced appetite, nausea and vomiting. Symptoms are induced by a fatty meal.
- ✓ **Symptoms of gastroenteritis?**
  - **Why:** e.g. reduced appetite, nausea, vomiting, fever, diarrhea.
- ✓ **Symptoms of gastritis?**
  - **Why:** e.g. indigestion, vomiting, sometimes coffee ground vomit and melena (black tarry offensive stools) due to gastrointestinal bleeding. Gastritis may also cause poor appetite and an early feeling of fullness after eating.
- ✓ **Symptoms of achalasia (disordered motility of the esophagus)?**
  - **Why:** e.g. intermittent difficulty with swallowing both solids and liquids; regurgitation of food into mouth from the esophagus may occur, particularly at night; occasionally food may get stuck; drinking large quantities of fluids help force the food through if food gets stuck; severe pain behind the breastbone due to dysfunctional contraction of the esophagus; weight loss may occur but is usually not marked. May also have poor appetite and a feeling of fullness after eating.
- ✓ **Symptoms of depression?**
  - **Why:** e.g. depressed mood, crying spells, anhedonia (loss of interest or pleasure), increase or decrease in appetite (usually decreased), weight loss or gain, insomnia or increased sleeping (usually early morning waking), fatigue, loss of energy, feelings of worthlessness, feelings of excessive guilt, poor concentration, difficulty making decisions, low libido, thoughts of death or suicide attempt.
- ✓ **Symptoms of anxiety?**
  - **Why:** e.g. nervousness, shakiness, tremor, restlessness, irritability, insomnia, poor concentration, heart palpitations, racing heart, sweating, dizziness, diarrhea, lump in throat, reduced appetite and frequency of urination.
- ✓ **Symptoms of Manic-depression?**
  - **Why:** e.g. episodes of depression (often psychotic in intensity) and at other times episodes of psychotic excitement (mania or hypomania). Symptoms of psychotic excitement may include elevation of mood, increased activity, grandiose ideas, irritability, disinhibition (which affects social, sexual and financial behavior), rapid speech and racing thought, delusions (persecutory or grandiose) and sometimes hallucinations. May sometimes have poor appetite.
- ✓ **Symptoms of brain tumor?**
  - **Why:** e.g. headache, dementia, seizures, stroke-like symptoms.
- ✓ **Symptoms of esophageal cancer?**
  - **Why:** e.g. progressive difficulty with swallowing; initially there is difficulty with swallowing solids, but eventually difficulty with swallowing liquids also occurs. Pain occurs if food gets stuck due to narrowing of the esophageal lumen. Weight loss occurs due to difficulty with swallowing and also due to reduced appetite.
- ✓ **Symptoms of achalasia?**
  - **Why:** e.g. intermittent difficulty with swallowing both solids and liquids; regurgitation of food into mouth from the esophagus may occur, particularly at night; occasionally food may get stuck; drinking large quantities of fluids help force the food through if food gets stuck; severe pain behind the breastbone due to dysfunctional contraction of the esophagus; weight loss may occur but is usually not marked.
- ✓ **Symptoms of hypothyroidism?**
  - **Why:** e.g. lethargy, weight gain despite reduced appetite, constipation, puffiness of face and eyes, hair loss, dry skin.
- ✓ **Symptoms of anorexia nervosa?**
  - **Why:** e.g. obsessive pursuit of thinness through dieting, extreme weight loss, disturbance of body image, intense fear of becoming fat, loss of menstrual periods.

- **Past medical history?**

Why: e.g. diabetes; risk factors for liver cancer include carriers of hepatitis B and C, alcoholic cirrhosis and hemochromatosis; Hypothyroidism may be associated with previous Graves disease, Rheumatoid arthritis, Down Syndrome, previous radioactive ablation of the thyroid.

- **Past surgical history?**

Why: e.g. gastric surgery may be complicated by chronic delayed gastric emptying, early fullness after eating and poor appetite.

- **Past psychiatric history?**

Why: many mental illnesses may cause poor appetite and cause people to lose interest in eating including depression, anxiety, bipolar affective disorder, anorexia nervosa, bulimia nervosa.

- **Medications?**

Why: e.g. many medications may cause poor appetite including appetite suppressants, non-steroidal anti-inflammatory medications, erythromycin, digoxin, phenylpropanolamine, codeine, morphine, Demerol and aspirin; hypothyroidism may be caused by lithium or amiodarone.

- **Illicit drug use?**

Why: e.g. amphetamines will suppress the appetite.

- **Family history?**

Why: e.g. ovarian cancer, thyroid disease, depression.

- **Alcohol history?**

Why: Alcoholic people frequently have a loss of appetite. Alcohol in high concentrations may cause gastritis.

c. *Fever*

- **How long have you had the fever?**

Why: to determine if acute or chronic.

- **What is the pattern of the fever?**

Why: e.g. intermittent fever of malaria, Epstein-Barr virus and ascending cholangitis; continuous fever is common with viral infections such as influenza; remittent fever where temperature returns towards normal for a variable period but is always elevated may occur with pelvic abscess, wound infection and cancer; undulant fever where bouts of fever for several days are followed by several days of normal temperature occur with brucellosis infection and lymphomas.

- **Associated symptoms**

✓ **Pain and location of the pain?**
  - **Why:** can help determine focus of infection e.g. sore throat may indicate streptococcal pharyngitis, viral upper respiratory infection, infectious mononucleosis, leukemia and subacute thyroiditis; headache may indicate meningitis or encephalitis; chest pain may suggest pulmonary infarction, heart attack, Bornholm disease, tuberculosis, pleurisy or empyema; abdominal pain may suggest pyelonephritis, cholecystitis, appendicitis, liver abscess or diverticulitis; joint pain may suggest rheumatic fever, rheumatoid arthritis or septic arthritis; ear ache may suggest middle ear infection or mastoiditis.

✓ **-Frequency and burning of urine?**
  - **Why:** would suggest pyelonephritis, abscess around the kidney or abscess in the prostate.

✓ **Cough?**
  - **Why:** may suggest pneumonia, lung abscess, bronchiectasis, tuberculosis or chronic fungal disease in the lung.

✓ **Bone pain or bone swelling?**
  - **Why:** may suggest osteomyelitis.

✓ **Body discharge?**
  - **Why:** e.g. vaginal, penile, anal, tooth, ear, nasal.

✓ **Body rash?**

- **Why:** may help determine cause of fever e.g. drug reaction, meningococcemia, viral illnesses, subacute bacterial endocarditis, secondary syphilis, pemphigus, lupus erythematosus, dermatomyositis,

- **Travel history?**

Why: overseas travelers or visitors may have special or even exotic infections.

- **Past medical history?**

Why: e.g. AIDS, Rheumatic fever, pneumonia, immunodeficiency, cancer.

- **Recent surgery?**

Why: may suggest post-operative complication e.g. wound infection, aspiration pneumonia, lung collapse, urinary catheter related urinary tract infection, intra-abdominal abscess.

- **Medications?**

Why: drugs can cause fever, presumably due to hypersensitivity e.g. allopurinol, antihistamines, barbiturates, cephalosporins, cimetidine, methyl dopa, penicillins, isoniazid, phenytoin, procainamide, salicylates, sulphonamides; some drugs can suppress the immune system and increase risk of infections e.g. cancer chemotherapy agents.

d. Rash

- **How long have you had the rash?**

Why: to determine if acute or chronic.

- **Where is the rash and where did it start?**
- **Contact with anyone that also has had a rash?**

Why: e.g. may suggest scabies, chicken pox, impetigo, meningococcal disease.

- **Past history of skin disorders?**

Why: e.g. atopic dermatitis (eczema), hives, scabies, dermatitis herpetiformis, asteatosis (dry skin).

- **Have you worn any new clothing recently?**

Why: may provide information concerning contact dermatitis.

- **Have you used any new cosmetic products recently?**

Why: e.g. perfumes, hair sprays etc may cause allergic contact dermatitis.

- **Do you have an allergic tendency?**

Why: e.g. asthma, hayfever - increases the chance of atopic dermatitis (eczema).

- **Aggravating factors?**

Why: e.g. eczema may be aggravated by soap, frequent washing, chlorinated water, bubbles baths, sweating (because it is drying), sand pits, winter months, extremes of hot and cold weather, emotional stress, wool clothing or blankets, chemical disinfectants, detergents, scratching or rubbing, pregnancy, menstruation and various food stuffs.

- **Associated symptoms**

✓ **Fever?**
- **Why:** may suggest chicken pox, serum sickness, eczema herpeticum, exfoliative dermatitis, severe allergic contact dermatitis from poison ivy.

✓ **Itch, and if so is the itch mild, moderate or severe?**
- **Why:** e.g. a very itchy rash may suggest hives, atopic dermatitis, scabies, skin lice, insect bites, chicken pox, dermatitis herpetiformis; a mild to moderate itchy rash may suggest tinea, psoriasis, drug eruption, pityriasis rosea, candida or lichen simplex.

✓ **Nails affected?**
- **Why:** may suggest psoriasis or tinea.

✓ **Butterfly shaped facial rash?**
- **Why:** suggests systemic lupus erythematosus.

✓ **Symptoms of atopic dermatitis (eczema)?**
- **Why:** e.g. itchy, red, dry, scaling, cracked skin. The typical distribution changes as the person grows older. In infants the rash is usually on the cheeks of the face, the folds of the

neck and scalp. It may then spread to the limbs and groin. During childhood a drier ad thicker rash develops in front of the elbow, behind the knees and on the hands and feet, which may be dry, itchy, cracked and painful. Rarely does eczema have an adult onset.

- ✓ **Symptoms of allergic contact dermatitis?**
  - **Why:** e.g. may range from faint redness to severe swelling, symptoms are often worse in area around the eyes, genitals and on hairy skin, symptoms are least on hairless skin such as palms and soles. Allergic contact dermatitis is usually confined to the site of exposure to the allergen.
- ✓ **Symptoms of psoriasis?**
  - **Why:** e.g. red lesions that enlarge and develop a silvery scale. The commonest sites are the backs of the elbows and knees, then the scalp, sacral areas, genital and nails.
- ✓ **Symptoms of meningococcal septicemia?**
  - **Why:** e.g. may start with cough, headache, sore throat, nausea, vomiting and then progress to spiking fevers, chills, aching joints and muscles. Later drowsiness, hemorrhagic rash most commonly on trunk and extremities but can be anywhere, and low blood pressure. May have stiff neck and dislike for light.
- ✓ **Symptoms of lupus erythematosus?**
  - **Why:** e.g. fever, malaise, tiredness, Raynaud's syndrome, butterfly shaped facial rash. Systemic lupus erythematosus may be complicated by protein in the urine.
- ✓ **Symptoms of Rosacea?**
  - **Why:** e.g. flushing of the face with increases in skin temperature, acne-like rash over the face. May be complicated by blepharitis, conjunctivitis, episcleritis or corneal ulcers.
- ✓ **Symptoms of sarcoidosis?**
  - **Why:** e.g. shortness of breath, cough, tiredness, skin symptoms occur in 10% of cases and may include purple or brown plaques or nodules on face, nose, ears and neck in chronic sarcoidosis.
- ✓ **Symptoms of dermatomyositis?**
  - **Why:** e.g. muscle weakness, muscle tenderness, muscle pain, purple colored rash on face (especially on the eyelids, upper cheeks and forehead), swelling round the eyes, red rashes, pain in joints, Raynaud's phenomenon, difficulty swallowing, fever, weight loss, tiredness.

- **Past medical history?**

Why: e.g. Celiac disease may be associated with dermatitis herpetiformis; presence of other allergic type conditions such as asthma, hives and hay fever increase the risk of atopic dermatitis; varicose veins may suggest varicose eczema (patches of dry scaly skin that overlie leg varicose veins); Erythema nodosum may be associated with sarcoidosis, inflammatory bowel disorders (Crohn's disease and ulcerative colitis) and some infections (streptococcal, tuberculosis, leprosy and fungal infections); necrobiosis lipoidica is often associated with diabetes mellitus.

- **Medications?**

Why: some medications may cause sensitivities such as aspirin, morphine and codeine.

- **Known allergies?**

Why: e.g. food allergies, insect allergies, drug allergy.

- **Family history?**

Why: e.g. allergies, psoriasis, eczema.

- **Occupational history?**

Why: e.g. exposure to fiberglass may cause a generalized sensitivity; allergic contact dermatitis e.g. contact with resins, rubber, latex, dyes

e. *Fatigue*

- **How long have you felt fatigued?**

Why: to determine if acute or chronic.

- **Is the fatigue intermittent or constant?**

Why: Intermittent fatigue may suggest myasthenia gravis. Constant fatigue may be due to any of the other disorders, however if not associated with weight loss should consider a psychiatric disorder.

- **Are there simple reasons to explain fatigue?**

Why: e.g. not getting enough sleep, sleep debt, shift work, jet lag and boredom.

- **What is the quality of your sleep?**

Why: e.g. insomnia, obstructive sleep apnea, narcolepsy. Sleep disturbance is a common cause of fatigue.

- **What are your stressors at the moment?**

Why: questions specifically about relationship, family, children, social support, occupation, general physical health and financial stresses. Stress related to lifestyle is the commonest cause of fatigue.

- **Have you had a recent viral infection?**

Why: a viral infection or post-viral infection are common causes of fatigue.

- **Are you, or could you be pregnant?**

Why: Fatigue is a feature of pregnancy, especially in the early stages.

- **Associated symptoms**

✓ **Weight loss?**
  - **Why:** must consider cancer, hyperthyroidism, diabetes mellitus, malnutrition, gut malabsorption and chronic infectious disease (e.g. tuberculosis, subacute bacterial endocarditis).

✓ **Fever?**
  - **Why:** should consider tuberculosis, subacute bacterial endocarditis, toxoplasmosis, infectious mononucleosis, brucellosis.

✓ **Pallor of the skin?**
  - **Why:** most likely cause is a type of anemia such as associated with malabsorption syndrome, iron deficiency, pernicious anemia or anemia due to blood loss.

✓ **Polyuria (excessive urination)?**
  - **Why:** may suggest hyperthyroidism, diabetes mellitus, hyperparathyroidism and chronic renal failure.

✓ **Orthopnea (breathlessness lying down flat)?**
  - **Why:** suggests left ventricular heart failure.

✓ **Paroxysmal nocturnal dyspnea (inappropriate severe breathlessness causing waking from sleep)?**
  - **Why:** suggests left ventricular failure.

✓ **Symptoms of depression?**
  - **Why:** e.g. sadness, crying spells, lack of interest in activities, poor energy, poor concentration and attention span, poor sleep, reduced libido, poor self esteem and sometimes suicidal thoughts.

✓ **Symptoms of anxiety?**
  - **Why:** e.g. nervousness, shakiness, tremor, tiredness, restlessness, irritability, insomnia, poor concentration, heart palpitations, racing heart, sweating, dizziness, diarrhea, lump in throat and frequency of urination - anxiety and depression are very closely related and may co-exist, however anxiety may mask an underlying depression. Anxiety is a common cause of fatigue.

✓ **Range of somatic (physical) symptoms?**
  - **Why:** e.g. tiredness, headache, constipation, indigestion, weight loss, dry mouth, unusual pains or sensations in the chest and abdomen - not uncommonly occur with depression and tend to mask a diagnosis of depression. Depression can be associated with many illnesses but it is important to realize that these somatic symptoms may be the presentation of depressive illness. Depression is a common cause of fatigue.

✓ **Symptoms of chronic fatigue syndrome?**

- **Why:** e.g. extreme exhaustion (with minimal physical effort), headache (or a vague "fuzzy" feeling in the head), aching in the muscles and legs, poor concentration and memory, excessive sleep, waking feeling tired, emotional lability, aching joints, sore throat, tender swollen lymph nodes and depressive-like illness.

✓ **Symptoms of diabetes mellitus**
- **Why:** e.g. frequent urination, excessive thirst, weight loss, fatigue.

✓ **Symptoms of hypothyroidism?**
- **Why:** e.g. husky voice, tiredness, weight gain, constipation, cold intolerance, loss of hair.

✓ **Symptoms of hemochromatosis?**
- **Why:** e.g. fatigue, painful joints, impotence, bronze discoloration of skin.

✓ **Symptoms of Conn's syndrome?**
- **Why:** e.g. weakness, frequency of urine, excessive thirst.

✓ **Symptoms of Addison's disease?**
- **Why:** e.g. pigmentation, tiredness, weight loss, loss of appetite, nausea and diarrhea.

✓ **Symptoms of hyperthyroidism?**
- **Why:** e.g. loose bowel motions, intolerance to heat, sweating of hands, muscle weakness, increased appetite, weight loss, heart palpitations, emotional lability.

✓ **Menopausal symptoms?**
- **Why:** e.g. palpitations, hot flushes, night sweats - fatigue is a common symptom in menopausal women and is often associated with these other symptoms.

✓ **Symptoms of obstructive sleep apnea?**
- **Why:** e.g. loud snoring, daytime sleepiness and fatigue, unrefreshed sleep, restless sleep, morning headache, nocturnal choking, reduced libido.

✓ **Symptoms of Parkinson's disease?**
- **Why:** e.g. coarse hand tremor most marked at rest, rigidity of limbs, slowness in initiating and executing movements and speech, expressionless mask-like face and dementia.

✓ **Symptoms of Myasthenia gravis?**
- **Why:** e.g. easy muscle fatigability especially eyelids, neck, shoulders, lower legs and trunk, droopy eyelids, double vision, weak voice

- **Medications?**

Why: e.g. chronic aspirin ingestion may cause chronic fatigue; may other drugs have the capacity to cause tiredness and fatigue such as anticonvulsants, antidepressants, antihistamines, antihypertensives, anti-anxiety medications, steroids, digoxin and pain killers.

- **Caffeine ingestion?**

Why: e.g. caffeine abuse may cause chronic fatigue.

- **Drug or alcohol abuse?**

Why: e.g. alcoholism and cocaine abuse are associated with chronic fatigue; drug withdrawal (especially from illicit drugs such as amphetamines, marijuana, cocaine and heroin) may cause fatigue.

- **Dietary history?**

Why: e.g. fad diets or skipped meals may cause fatigue.

f. Bleeding under skin

- **How long have you had bleeding under the skin?**

Why: determines if acute or chronic; acquired or inherited.

- **Type of bruising under the skin?**

Why: purpura (multiple small hemorrhages into the skin or mucous membranes); petechiae (small pinhead size purpura); ecchymoses (large purpura).

- **If petechiae are present, are they palpable?**

Why: if palpable it suggests due to an underlying vasculitis affecting small vessels e.g. polyarteritis nodosa; if not palpable it suggests due to a platelet defect.

- **Is bruising abnormal and out of proportion to the offending injury?**

Why: suggests a disturbance of coagulation.

- **Is bleeding spontaneous?**

Why: suggests the presence of a systemic bleeding defect.

- **Does bleeding occur immediately after trauma or is it delayed?**

Why: if immediate suggests platelet defect; if delayed i.e. 24 hrs after trauma it suggests a coagulation factor deficiency.

- **What has been the response to previous coagulation stresses?**

Why: e.g. tooth extraction, circumcision, pregnancy - if normal response, suggests an acquired not inherited problem.

- **Did you notice a viral illness or sore throat beforehand?**

Why: may suggest acute Immune thrombocytopenic purpura (ITP) especially in children..

- **Associated symptoms**

✓ **Have you noticed bleeding from other areas?**
  - **Why:** e.g. blood in urine, heavy menstrual periods, bleeding nose, bleeding gums, swollen painful joints, rectal bleeding? - suggests presence of a systemic bleeding defect.

✓ **Tiredness, weight loss, fever or sweats**
  - **Why:** may suggest malignancy such as leukemia.

✓ **Skin rash**
  - **Why:** may suggest lupus erythematosus which can cause an autoimmune thrombocytopenia.

✓ **Widespread itchiness of skin**
  - **Why:** may suggest myeloproliferative cancers that can cause an acquired bleeding disorder or iron deficiency secondary to blood loss.

- **Past medical history?**

Why: Acquired bleeding disorders can occur with liver disease, renal failure, lupus erythematosus and some cancers such as Multiple myeloma, myelofibrosis.

- **Medications?**

Why: Acquired bleeding disorders may be due to certain prescribed medications e.g. aspirin, non-steroidal anti-inflammatory medication, anticoagulant therapy, thiazide diuretics, chloramphenicol, cancer chemotherapy drugs, gold, heparin, quinine, quinidine, sulphonamides.

- **Family history of bleeding symptoms/ bleeding disorders?**
- **Alcohol history?**

Why: Alcoholic cirrhosis can cause an acquired bleeding disorder

g. Bleeding symptoms

- **How long have you had bleeding symptoms?**

Why: determines if acute or chronic; acquired or inherited.

- **Is bruising abnormal and out of proportion to the offending injury?**

Why: suggests a disturbance of coagulation.

- **Is bleeding from multiple sites?**

Why: suggests the presence of a systemic bleeding defect.

- **Is bleeding spontaneous?**

Why: suggests the presence of a systemic bleeding defect.

- **Does bleeding occur immediately after trauma or is it delayed?**

Why: if immediate suggests platelet defect; if delayed i.e. 24 hrs after trauma it suggests a coagulation factor deficiency.

- **What has been the response to previous coagulation stresses?**

Why: e.g. tooth extraction, circumcision, pregnancy - if normal response, suggests an acquired not inherited problem.

- **Did you notice a viral illness or sore throat beforehand?**

Why: may suggest acute Immune thrombocytopenic purpura (ITP) especially in children.

- **Associated symptoms**

✓ **Easy bruising**
  - **Why:** purpura (multiple small hemorrhages into the skin or mucous membranes); petechiae (small pinhead size purpura); ecchymoses (large purpura).

✓ **If petechiae are present, are they palpable**
  - **Why:** if palpable it suggests due to an underlying vasculitis affecting small vessels e.g. polyarteritis nodosa; if not palpable it suggests due to a platelet defect.

✓ **Blood in urine**

✓ **Heavy menstrual periods**

✓ **Bleeding nose**

✓ **Bleeding gums**

✓ **Swollen painful joints**

✓ **Rectal bleeding**

✓ **Tiredness, weight loss, fever or sweat?**
  - **Why:** may suggest malignancy such as leukemia.

✓ **Skin rash?**
  - **Why:** may suggest lupus erythematosus which can cause an autoimmune thrombocytopenia.

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- **Medications?**

Why: Acquired bleeding disorders may be due to certain prescribed medications e.g. aspirin, non-steroidal anti-inflammatory medication, anticoagulant therapy, thiazide diuretics, chloramphenicol, cancer chemotherapy drugs, gold, heparin, quinine, quinidine, sulphonamides.

- **Family history of bleeding symptoms/ bleeding disorders?**
- **Alcohol history?**

Why: Alcoholic cirrhosis can cause an acquired bleeding disorder

h. Bruising

- **How long have you had the bruising ?**

Why: determines if acute or chronic; acquired or inherited.

- **Type of bruising under the skin?**

Why: purpura (multiple small hemorrhages into the skin or mucous membranes); petechiae (small pinhead size purpura); ecchymoses (large purpura).

- **If petechiae are present, are they palpable?**

Why: if palpable it suggests due to an underlying vasculitis affecting small vessels e.g. polyarteritis nodosa; if not palpable it suggests due to a platelet defect.

- **Is bruising abnormal and out of proportion to the offending injury?**

Why: suggests a disturbance of coàgulation.

- **Is bruising spontaneous?**

Why: suggests the presence of a systemic bleeding defect.

- **Does bruising occur immediately after trauma or is it delayed?**

Why: if immediate suggests platelet defect; if delayed i.e. 24 hrs after trauma it suggests a coagulation factor deficiency.

- **What has been the response to previous coagulation stresses?**

Why: e.g. tooth extraction, circumcision, pregnancy - if normal response, suggests an acquired not inherited problem.

- **Did you notice a viral illness or sore throat beforehand?**

Why: may suggest acute Immune thrombocytopenic purpura (ITP) especially in children.

- **Associated symptoms**

✓ **Have you noticed bleeding from other areas?**
- **Why:** e.g. blood in urine, heavy menstrual periods, bleeding nose, bleeding gums, swollen painful joints, rectal bleeding? - suggests presence of a systemic bleeding defect.

✓ **Tiredness, weight loss, fever or sweats?**
- **Why:** may suggest malignancy such as leukemia.

✓ **Skin rash?**
- **Why:** may suggest lupus erythematosus which can cause an autoimmune thrombocytopenia.

✓ **Widespread itchiness of skin?**
- **Why:** may suggest myeloproliferative cancers that can cause an acquired bleeding disorder or iron deficiency secondary to blood loss

- **Past medical history?**

Why: Acquired bleeding disorders can occur with liver disease, renal failure, lupus erythematosus and some cancers such as Multiple myeloma, myelofibrosis.

- **Medications?**

Why: Acquired bleeding disorders may be due to certain prescribed medications e.g. aspirin, non-steroidal anti-inflammatory medication, anticoagulant therapy, thiazide diuretics, chloramphenicol, cancer chemotherapy drugs, gold, heparin, quinine, quinidine, sulphonamides.

- **Family history of bleeding symptoms/ bleeding disorders?**
- **Alcohol history?**

Why: Alcoholic cirrhosis can cause an acquired bleeding disorder.

i. Clubbing

- **How long have you noticed clubbing of the fingers (increase in the soft tissue of the distal part of the fingers and toes)?**
- **Past medical history?**

Why: e.g. congenital heart disease and rheumatic heart disease can increase the risk of endocarditis; known cyanotic congenital heart disease; bronchiectasis; cystic fibrosis; Crohn's disease; Ulcerative colitis; Coeliac disease.

- **Occupational or other exposure to asbestos?**

Why: may indicate asbestosis or pleural mesothelioma as cause of clubbing.

- **Associated symptoms**

✓ **Blueness of the tongue or lips?**
- **Why:** determines presence of cyanosis and thus may suggest cyanotic congenital heart disease and pulmonary arteriovenous aneurysms.

✓ **Cough or shortness of breath?**
- **Why:** may suggest a lung condition such as bronchiectasis, chronic interstitial fibrosis, asbestosis, emphysema, lung cancer, lung abscess, cystic fibrosis or tuberculosis.

✓ **Fever?**
- **Why:** may suggest empyema (pus in the cavity enclosing the lungs), lung abscess, tuberculosis, subacute bacterial endocarditis.

✓ **Symptoms of hyperthyroidism?**
- **Why:** e.g. intolerance to heat, tremor, agitation, weight loss, increased appetite.

- **Family history?**

Why: e.g. cystic fibrosis, cyanotic congenital heart disease, thyroid disorders, celiac disease, Crohn's disease, Ulcerative colitis.

- **Cigarette smoking**

Why: now and in the past? - increases the risk of lung cancer and increases the severity of asbestosis.

- **Intravenous drug abuse?**

Why: increases risk of subacute endocarditis

j. Headache

- **Have you got the headache at present?**
- **Have you had this type of headache before?**
- **How often do you get the headaches?**
- **How long do the headaches last?**
- **Where exactly is the headache?**
- **How would you describe the headache?**
- **Gradual or sudden onset of the headache?**

Why: If sudden and severe headache must consider possibility of subarachnoid hemorrhage.

- **Is there anything that will bring the headaches on, or worsen the headache?**

Why: e.g. exertion such as coughing, sneezing, stooping, straining, lifting and various sporting activities (exertional headache); after sexual intercourse (post-coital headache); migraines may be triggered by many factors including certain foods, alcohol, bright light, glare, emotional stress, allergens, excessive noise, strong perfume, tiredness, stress, relaxation after stress, exercise, menstruation or pregnancy; cluster headaches may be aggravated by alcohol; headaches from cervical spondylosis may be aggravated by moving the neck.

- **Is there anything that can relieve the headaches?**

Why: e.g. migraines are relieved with sleeping; tension headaches may be relieved by alcohol; headaches due to cervical spondylosis or dysfunction may be relieved by heat or cold compresses to the neck.

- **What time of the day is the headache worse?**

Why: e.g. if patient wakes with the headache consider migraine, cervical spondylosis, depression, hypertension or brain tumor; frontal sinusitis often starts at around 9am and builds to a maximum at around 1 pm, then subsides over the next few hours; cluster headaches often start suddenly through the night around 2-3 hrs after falling asleep.

- **Are you under a lot of stress or tension?**

Why: may suggest tension headache (commonest cause of chronic recurrent headache).

- **Have you had a heavy cold recently?**

Why: may suggest cause of headache is a respiratory infection (this is the most common cause of headache) or sinusitis.

- **Recent head injury?**

Why: may suggest concussion, post-concussion headache, extradural haematoma, subdural haematoma or headache from cervical spondylosis or cervical dysfunction.

- **Have you had a recent spinal procedure?**

Why: e.g. epidural, lumbar puncture or spinal anesthesia - may be cause of the headache, usually which come on when standing upright and relieved by lying down.

- **Risk factors for benign intracranial hypertension?**

Why: e.g. young, obese females, combined oral contraceptive pill, tetracycline, nitrofurantoin, Vitamin A preparations.

- **Associated symptoms**

✓ **Pain in the back of the head or neck?**
  - **Why:** may suggest cervical spondylosis (degeneration), cervical dysfunction.

✓ **Nausea or vomiting?**
  - **Why:** may suggest migraine, brain tumor, meningitis or subarachnoid hemorrhage.

✓ **Unusual sensations in your eyes, such as flashing lights?**
  - **Why:** may suggest migraine or preeclampsia.

✓ **Dizziness, weakness or any strange sensations?**

✓ **Does the light hurt your eyes?**

- **Why:** may suggest migraine, meningitis.

✓ **Do you get blurred vision?**
- **Why:** may suggest refractive errors of the eyes, migraine, brain tumor or benign intracranial hypertension as cause of headache.

✓ **Watering or redness of one or both of your eyes?**
- **Why:** suggests cluster headache.

✓ **Pain or tenderness on combing your hair?**
- **Why:** may suggest tension headache (as scalp is often tender to touch) or temporal arteritis.

✓ **Does your nose run when you get the headaches?**
- **Why:** may suggest cluster headache.

✓ **Fever, sweats or chills?**
- **Why:** may suggest sinusitis, meningitis, encephalitis, respiratory illness or brain abscess.

✓ **Teeth pain?**
- **Why:** may suggest dental disorders or sinusitis as the cause of headache.

✓ **Jaw pain?**
- **Why:** suggests temporomandibular joint dysfunction or temporal arteritis (if jaw pain occurs with eating).

✓ **Seizures?**
- **Why:** may suggest brain tumor or meningitis.

✓ **Symptoms of tension headache?**
- **Why:** e.g." tight" pressure feeling over the forehead and temples, may radiate to the back of the head, lasts for hours, usually starts after rising and gets worse throughout the day, aggravated by stress overwork and skipping meals, may be relieved by alcohol. May be associated with lightheadedness, fatigue and neck ache.

✓ **Symptoms of migraine headache?**
- **Why:** e.g. intense throbbing unilateral headache over the front or side of the head, may radiate to behind the eyes or back of head, lasts from 4-72 hours (average 6-8 hours), often the person wakes with the headache and it is relieved by sleep. It may be associated with nausea, vomiting, visual field loss or numbness on one side of face. In children it may be associated with abdominal pain.

✓ **Symptoms of frontal sinusitis?**
- **Why:** e.g. may follow an upper respiratory tract infection or rhinitis. Dull throbbing headache over the forehead and behind the eyes, often but not always unilateral. Often develops in the morning at around 9am and subsides around 6pm. Aggravated by leaning forward. May be associated with fever.

✓ **Symptoms of cluster headache?**
- **Why:** e.g. paroxysmal clusters of unilateral headache over or about one eye which occur nightly, often in the early hours of the morning. Headaches last 15minutes to 2-3 hours and the clusters last for 4-6 weeks. May be associated with runny nose or eye on the same side of the headache, flushing of the forehead and cheek or droopy eyelid.

✓ **Symptoms of headaches from cervical spondylosis or cervical dysfunction?**
- **Why:** e.g. nagging dull aching pain over the back of the head which may radiate to the sides or top of the head. Person will often wake with the headache and it will often settle around midday. May be associated with grating in the neck or pins and needles over one side of the back of the scalp.

✓ **Symptoms of temporal arteritis?**
- **Why:** e.g. severe constant unilateral throbbing headache on the forehead and the side of the head and can radiate around the side to the back of the head. Tends to be worse in the morning and is aggravated by stress and anxiety. May be associated with vague aches and pains in the muscles of the neck and shoulders, weight loss, intermittent blurred vision, tenderness when brushing the hair, pain in the jaw with eating. Usually occurs in people aged over 50 years.

- **Medications?**

Why: e.g. monoamine (MAO) inhibitor antidepressants may cause headaches if the person also consumes foodstuffs containing tyramine such as cheese, yeast extracts, broad beans, cream, chocolate and alcohol; medications that may cause headache include non-steroidal anti-inflammatory drugs, corticosteroids, cyclosporine, oral contraceptive pill, calcium channel blockers, nitrates, theophylline, quinine, nitrazepam, ranitidine, beta-blockers, methyldopa, hydrallazine and dipyridamole. Some medications if taken regularly may cause rebound headache if you stop taking them such as aspirin, codeine and ergotamine. Benign intracranial hypertension may be linked with oral contraceptive pill, tetracycline, nitrofurantoin and Vitamin A preparations.

- **Alcohol history?**

Why: e.g. alcohol hangover or withdrawal may cause headache.

- **Caffeine intake?**

Why: including coffee, soft drinks and chocolate. Caffeine withdrawal may cause a headache.

- **Family history?**

Why: e.g. migraine, cluster headaches

k. *Joint pain*

- **How long have you had joint pain?**

Why: to determine if acute or chronic.

- **Is the joint pain localized to one joint?**

Why: would suggest septic arthritis, gout, tuberculosis, hemophilia, sickle cell disease, trauma, avascular necrosis and pseudogout.

- **Is it symmetrical or asymmetrical?**
- **Which joints are involved?**
- **Is the joint pain migratory?**

Why: i.e. joint pain moves from joint to joint? - may suggest rheumatic fever.

- **What is the age of the person with the joint pain?**

Why: Younger people may have sickle cell disease, hemophilia, trauma, rheumatic fever, Still's disease and gonococcal arthritis. Older people are more likely to have osteoarthritis, polymyalgia rheumatica and gout. There is however a significant overlap.

- **How would you explain the joint pain?**

Why: e.g. throbbing pain may suggest inflammation of the joints and suggests Rheumatoid arthritis, psoriatic arthritis, Reiter's disease, ankylosing spondylitis; severe episodic pain may suggest gout.

- **What time of the day is the joint pain worse?**

Why: Inflammatory pain is worse at night and in early morning; mechanical joint pain due to injury or osteoarthritis is worse at the end of the day and after activity; Continuous pain present day and night is suggestive of infection or bone tumor.

- **Night pain?**

Why: may indicate inflammation, bursitis or bone tumor.

- **Aggravating and relieving factors?**

Why: inflammatory joint pain causes pain at rest , relieved by activity ; mechanical joint pain due to injury is exacerbated by activity and relieved by rest ;osteoarthritis causes pain with or after activity and relieved with rest.

- **Have you had a recent viral -type infection?**

Why: may suggest viral arthritis including influenza, mumps, rubella, varicella, hepatitis A and B, infectious mononucleosis, cytomegalovirus, parvovirus, Ross river virus.

- **History of trauma to involved joint?**

Why: may indicate joint strain, joint sprain, tendonitis or bursitis of the joint or secondary osteoarthritis (osteoarthritis that follows injury and wear and tear).

- **Have you had recent mosquito bites?**

Why: may suggest Ross river fever or dengue fever.

- **Have you had a previous tick bite?**

Why: may suggest Lyme disease (may present months or even years after a tick bite).

- **Associated symptoms**

✓ **Fever?**
- **Why:** may suggest septic arthritis, rheumatic fever, gonococcal arthritis, Reiter's syndrome, lupus erythematosus, Lyme arthritis, polymyalgia rheumatica, Still's disease and rheumatoid arthritis.

✓ **Urethral discharge?**
- **Why:** would suggest Reiter's syndrome or gonococcal arthritis.

✓ **Low back pain?**
- **Why:** would suggest rheumatoid spondylitis, ochronosis or gout.

✓ **Recent diarrhea?**
- **Why:** may suggest enteropathic arthritis (such as due to Ulcerative colitis or Crohn's disease) or Reiter's syndrome.

✓ **Skin rash?**
- **Why:** may suggest psoriatic arthritis, gonococcal arthritis or HIV infection.

✓ **Eye pain?**
- **Why:** may suggest Ankylosing spondylitis, Reiter's disease.

✓ **Symptoms of Osteoarthritis?**
- **Why:** e.g. usually symmetrical and can affect many joints. Pain is worse at the end of the day and aggravated by use and cold weather, relieved by rest. Usually associated with pronounced stiffness, especially after activity.

✓ **Symptoms of Rheumatoid arthritis?**
- **Why:** e.g. usually starts with the gradual onset of pain and stiffness of the small joints of the hands and feet. Joint pain is worse on waking, nocturnal pain with disturbed sleep, pain is relieved with activity. Morning and rest stiffness can last for hours. May be associated with weakness, weight loss, malaise and fatigue.

✓ **Symptoms of gout?**
- **Why:** e.g. often excruciating pain in the great toe starting in the early hours of the morning, skin over the joint may be red, shiny, swollen and hot, joint is very tender to touch. Pain may be precipitated by alcohol excess, surgical operation, starvation and certain medications.

✓ **Symptoms of Viral arthritis?**
- **Why:** e.g. symmetrical involvement of many joints, mainly of the hands and feet and is usually mild pain. It is caused by many viruses, including those causing influenza, mumps, rubella, varicella, hepatitis A and B, infectious mononucleosis, cytomegalovirus, parvovirus, Ross river virus.

✓ **Symptoms of Rheumatic fever?**
- **Why:** e.g. typically occurs in children and young adults, migratory polyarthritis (many joints are involved, joints affected alter with time), involves large joints sequentially, one becoming hot, red, swollen and very painful as the other subsides. It rarely lasts more than five days in any one joint. Associated with acute fever.

✓ **Symptoms of hemochromatosis?**
- **Why:** e.g. fatigue, painful joints, impotence, bronze discoloration of skin. Joints involved are characteristically the second or third metacarpophalangeal joints (knuckles of the hand).

✓ **Symptoms of Polymyalgia Rheumatica?**
- **Why:** e.g. typically occurs in ages 60-70 presenting with pain and stiffness in shoulder, hip and cervical spine; symmetrical distribution; early morning stiffness. May be systemic signs such as weight loss, loss of appetite and fatigue. Painful restriction of movement of shoulders and hips.

✓ **Symptoms of Reiter's syndrome?**

- Why: e.g. conjunctivitis, urethritis (painful urination, penile discharge, vaginal discharge).

✓ **Symptoms of Crohn's disease, Ulcerative Colitis or gastroenteritis?**

✓ **Symptoms of Lyme disease?**

- Why: e.g. months or years after a tick bite develop joint pain, usually of the large joints such as knee; typical rash (a dough-nut shaped red rash about 6cm in diameter) at the bite site; heart disorders (especially abnormal rhythms of the heart) or disease of the central nervous system (including weakness of the muscles in the limbs, muscular pain or evidence of meningitis).

- **Past medical history?**

Why: systemic diseases that may predispose to or present with joint pain include psoriasis, ulcerative colitis, Crohn's disease, systemic lupus erythematosus, scleroderma, dermatomyositis, bleeding disorders, rheumatic fever, tuberculosis, hepatitis B, diabetes mellitus, Wegener's granulomatosis, HIV infection, lung cancer, hemochromatosis, sarcoidosis, hyperparathyroidism, Paget's disease.

- **Medications?**

Why: e.g. certain medications may precipitate gout including frusemide and thiazide diuretics; some medications may induce a Lupus syndrome including hydralazine, procainamide, phenytoin, chlorpromazine, isoniazid and methyldopa; other medications that may cause joint pain include cotrimazole, amoxicillin, mianserin, carbimazole and nitrofurantoin.

- **History of intravenous drug abuse?**

Why: may suggest septic arthritis, hepatitis B or C, HIV-associated joint disease, subacute bacterial endocarditis and serum sickness reactions.

- **Sexual history?**

Why: can determine risk of Reiter's syndrome, gonococcal arthritis, Hepatitis B or HIV viral arthritis.

- **Family history?**

Why: e.g. osteoarthritis, rheumatoid arthritis, inflammatory bowel disease, ankylosing spondylitis, psoriasis, gout, pseudogout, hemophilia.

- **Travel history?**

Why: can provide information about the risk of dengue fever

L. *Face swelling*

- **How long have you had the facial swelling?**

Why: to determine if acute or chronic.

- **Is the facial swelling generalized or localized?**

Why: e.g. may get generalized facial swelling with obesity, allergic reactions, Cushing's syndrome, nephrotic syndrome, preeclampsia, hypoalbuminaemia, SVC thrombosis, Lassa fever, Chagus disease, trichinosis.

- **Have you recently used any new cosmetics, hair sprays or make-ups?**

Why: may indicate possible allergic reaction.

- **Are you pregnant?**

Why: may indicate preeclampsia. Pregnancy increases the risk of cavernous sinus thrombosis.

- **Is there a history of head or facial trauma?**

Why: e.g. facial bone fracture and soft tissue injury to face may directly cause facial swelling; skull fracture may increase the risk of cavernous sinus thrombosis; facial burns may cause swelling.

- **Associated symptoms**

✓ **Rash?**

- Why: may indicate herpes zoster if rash is blister-like; red-purplish rash around the eyes may suggest dermatomyositis; hive-like rash suggest allergies, angioedema or anaphylaxis; acne-like facial rash may suggest rosacea.

- ✓ **Eye pain?**
  - **Why:** may indicate sinusitis, herpes zoster infection, orbital cellulitis, cavernous sinus thrombosis.
- ✓ **Itchy eye?**
  - **Why:** may suggest allergies or blepharitis.
- ✓ **Fever?**
  - **Why:** may indicate sinusitis, orbital cellulitis, tooth abscess, mumps, trichinosis, Chagas' disease.
- ✓ **Eye discharge?**
  - **Why:** e.g. purulent (pus-like) discharge usually indicates a bacterial infection; a clear watery or mucous discharge may suggest viral or allergic conjunctivitis.
- ✓ **Tooth pain?**
  - **Why:** may indicate a tooth abscess with facial swelling.
- ✓ **Symptoms of sinusitis?**
  - **Why:** e.g. nasal blockage, facial pain and tenderness.
- ✓ **Symptoms of nephrotic syndrome?**
  - **Why:** e.g. facial swelling, especially around the eyes; swelling of the arms, genitals and sometimes abdomen; frothy urine.
- ✓ **Symptoms of a stye?**
  - **Why:** e.g. painful , tender, red, swelling of the lid, which after a few days localizes and cures itself spontaneously by discharging pus at the lash base.
- ✓ **Symptoms of a Chalazion (meibomian gland cyst)?**
  - **Why:** e.g. firm, non-tender lump in the lid. The lump may have a history of previous infection.
- ✓ **Symptoms of blepharitis?**
  - **Why:** e.g. eyelids have burning, itching and red margins, eyelashes may have crusting and scales, discharge or stickiness especially in the morning. If present for years there may be loss of eyelashes or distortion (in-growing) of the eyelashes. There may be a Staphylococcal bacterial infection which can cause severe inflammation with pus-like discharge.
- ✓ **Symptoms of dacrocystitis?**
  - **Why:** e.g. swelling and redness of the tear sac near the inner corner of the eye.
- ✓ **Symptoms of Ocular shingles?**
  - **Why:** e.g. pain, tingling and numbness around the eye may precede a blistering rash and eyelid swelling. Fifty percent of people have the eye itself affected with either corneal ulcers, episcleritis or iritis.
- ✓ **Symptoms of Rosacea?**
  - **Why:** e.g. flushing of the face with increases in skin temperature, acne-like rash over the face. May be complicated by blepharitis, conjunctivitis, episcleritis or corneal ulcers.
- ✓ **Symptoms of preeclampsia?**
  - **Why:** e.g. pregnant woman with flashing lights seen in visual field, headache, generalized swelling of the face and legs, abdominal pain.
- ✓ **Symptoms of dermatomyositis?**
  - **Why:** e.g. red-purple rash with swelling around the eyes, progressive muscle weakness of the shoulder and thighs, difficulty in arising from sitting or laying position.
- ✓ **Symptoms of angioedema?**
  - **Why:** e.g. hive like skin rash, facial swelling, itch, fatigue, headache, weakness, numbness of tongue, difficulty breathing if airway is affected.
- ✓ **Symptoms of cavernous sinus thrombosis?**
  - **Why:** e.g. pain in the eye and forehead, proptosis (forward displacement of the eyeball), facial swelling, double vision due to weakness of the muscles that move the eye.
- ✓ **Symptoms of superior vena caval obstruction?**
  - **Why:** e.g. early morning headache, facial swelling and blueness, swelling of the arms, distended neck and chest veins. May be due to lung cancer, lymphoma or large goiter.

- ✓ **Symptoms of Cushing's syndrome?**
  - **Why:** e.g. weight gain especially central abdominal, change of appearance, moon-like face, thin skin, easy bruising, excessive facial hair growth, acne, muscle weakness, lack of or rare menstrual periods, poor libido, depression, psychosis, insomnia, frequent urination, excessive thirst, growth arrest in children.
- ✓ **Symptoms of hypothyroidism?**
  - **Why:** e.g. husky voice, tiredness, weight gain, constipation, cold intolerance, loss of hair, puffiness of the eyes and face.
- ✓ **Symptoms of trachoma?**
  - **Why:** e.g. watering eye, intense redness of the eye, scarring under the eyelids, ulcers on the surface of the eye, eyelid turn inwards and eyelashes scratch the surface of the eye. Trachoma is especially prevalent in outback areas and in aboriginal communities where hygiene may not be adequate.
- ✓ **Symptoms of trichinosis?**
  - **Why:** e.g. 24 hrs after the ingestion of contaminated meat may develop vomiting, diarrhea, abdominal pain and headache then may develop eyelid swelling, conjunctivitis, photophobia (dislike of eyes for light), fever, muscle pain and muscle spasm.
- ✓ **Symptoms of Chagas' disease (American trypanosomiasis)?**
  - **Why:** e.g. red hard lump at the bite site, enlarged local lymph nodes. If the portal of entry is the conjunctiva, may get unilateral swelling of the eyelids, conjunctivitis and enlarged neck lymph nodes. May also have fever, transient rash and swelling of the face and trunk

- **Past medical history?**

Why: e.g. Nephrotic syndrome may be caused by systemic lupus erythematosus and diabetes; Dermatomyositis may often be associated with malignancy especially breast, lung, ovary, stomach, colon and uterus; Hypoalbuminemia (reduced albumin in the blood) may be due to chronic liver disease, malnutrition, nephrotic syndrome or protein losing bowel disease (celiac disease, Crohn's disease, ulcerative colitis); superior vena caval obstruction may be due to lung cancer, large goiter or lymphoma; Cushing's syndrome; hypothyroidism may be associated with previous Grave's disease, rheumatoid arthritis, Down's syndrome or previous thyroid surgery.

- **Medications?**

Why: e.g. many medications such as penicillamine, high dose captopril and gold may cause nephrotic syndrome which can cause eyelid swelling; many medications may cause angioedema such as antibiotics especially penicillins, radiographic contrast agents, non-steroidal anti-inflammatory medications, ACE inhibitor antihypertensive medications, nifedipine, amiodarone, morphine, certain anti-cancer medications; oral contraceptive pill increases the risk of cavernous sinus thrombosis; Hypothyroidism may be caused by amiodarone and lithium.

- **Known allergies?**

Why: e.g. dust mite, mold, pollens; allergies may be associated with minimal change disease which is a cause of nephrotic syndrome.

- **Family history?**

Why: e.g. hereditary angioedema (C1 esterase inhibitor deficiency).

- **Travel history?**

Why: e.g. West African trypanosomiasis found mainly in West Africa, Southern Sudan and Uganda may cause puffy face and puffy droopy eyelids; Lassa fever is confined to sub-Saharan West Africa and may cause swollen face; Trichinosis is found predominantly in the USA and Europe; Chagus' disease is confined to South and Central America.

m. Leg swelling

- **How long have you had the leg swelling?**

Why: to determine if acute or chronic.

- **Where exactly is the swelling on the leg?**

Why: e.g. ankle, calf, thigh.

- **Is it unilateral or bilateral?**
- **Are there other areas of the body that are swollen?**

Why: e.g. abdomen, face, sacral area.

- **Did the swelling follow trauma or activity?**

Why: may suggest leg muscle injury e.g. ruptured gastrocnemius muscle, leg injury, compartment syndrome.

- **Are you pregnant?**

Why: Lower leg swelling in the absence of high blood pressure is a normal physiological adaptation to the pregnant state. It is more common towards the evening, in hot humid climates and in obese women.

- **Associated symptoms**

✓ **Symptoms of deep venous thrombosis?**
  - **Why:** e.g. diffuse leg swelling, leg warmth, ankle pitting edema.

✓ **Symptoms of acute lower limb ischemia or compartment syndrome?**
  - **Why:** e.g. sudden severe calf pain, absent pallor of skin, paresthesia or numbness of lower leg, paralysis or weakness of leg, swelling of the foot and ankle.

✓ **Symptoms of Hypothyroidism?**
  - **Why:** e.g. intolerance to cold , weight gain , constipation, non-pitting lower limb swelling.

✓ **Varicose veins?**
  - **Why:** may suggest venous incompetence and possible cause of ankle and lower leg swelling.

✓ **Symptoms of cardiac failure**
  - **Why:** e.g. shortness of breath on exertion, bilateral ankle swelling that is usually symmetrical and worse in the evenings, with improvement during the night. As the heart failure progresses, swelling ascends to involve the legs, thighs, genitalia and abdomen.

✓ **Symptoms of cellulitis?**
  - **Why:** e.g. brawny-red or reddish brown area of swollen skin which advances rapidly from its starting point. The advancing edge may be vague or sharply defined. Usually associated with a fever.

- **Past medical history?**

Why: e.g. diabetes, peripheral vascular disease and alcoholism can predispose to cellulitis; congestive heart failure and malignancy increases the risk of deep venous thrombosis; Congestive cardiac failure, liver cirrhosis, renal disease and hypothyroidism may cause of ankle and lower leg edema (swelling).

- **Risk factors for deep venous thrombosis**

Why: e.g. varicose veins, prolonged bed rest, congestive heart failure, major surgery, childbirth, malignancy, oral contraceptive pill.

- **Medications?**

Why: e.g. oral contraceptive pill increases risk of deep venous thrombosis; some medications may cause lower limb swelling including corticosteroids, progesterone, estrogen, anti-inflammatory medications, methyldopa, clonidine, calcium channel blockers, beta-adrenergic blockers, antidepressants.

- **Alcohol history?**

Why: may indicate risk of cirrhosis of the liver or cellulitis.

- **Recent overseas travel or period of immobility?**

Why: may increase risk of deep venous thrombosis.

n. *Puffy eyes*

- **How long have you had the puffy eyes?**

Why: to determine if acute or chronic.

- **What areas of the eyes are puffy?**

Why: e.g. eyelids or the eyes themselves. If the eye itself is puffy may suggest glaucoma, orbital cellulitis or ulcers on the surface of the eye.

- **Are the puffy eyes unilateral or bilateral?**
- **Are the puffy eyes generalized or localized?**

Why: e.g. localized puffiness near the inner corner of the eye may suggest dacrocystitis; styes cause a painful, red localized swelling of the lid margin, usually on the side of the lid closest to the nose; allergies, nephrotic syndrome, cellulitis, sinusitis usually cause generalized puffiness of the eyelid.

- **What is the age of the person with puffy eyes?**

Why: Normal aging may cause mild puffy eyes and sagging skin around the eyes.

- **Have you had a cold or running nose recently?**

Why: may indicate viral conjunctivitis.

- **Is there a history of exposure of a red discharging eye at school, work or home?**

Why: may indicate bacterial conjunctivitis.

- **Have you recently used any new cosmetics, hair sprays or make-ups?**

Why: may indicate possible allergic reaction with puffy eyelids.

- **Do you suffer from hay fever?**

Why: may suggest allergic conjunctivitis.

- **Associated symptoms**

✓ **Rash?**
  - **Why:** may indicate herpes zoster if rash is blister-like.

✓ **Eye pain?**
  - **Why:** may indicate sinusitis, herpes zoster infection, orbital cellulitis.

✓ **Itchy eye?**
  - **Why:** may suggest allergies or blepharitis.

✓ **Fever?**
  - **Why:** may indicate sinusitis, orbital cellulitis, trichinosis, Chagas' disease.

✓ **Eye discharge?**
  - **Why:** e.g. purulent (pus-like) discharge usually indicates a bacterial infection; a clear watery or mucous discharge may suggest viral or allergic conjunctivitis.

✓ **Symptoms of sinusitis?**
  - **Why:** e.g. nasal blockage, facial pain and tenderness, puffy eyelids.

✓ **Symptoms of nephrotic syndrome?**
  - **Why:** e.g. facial swelling, especially around the eyes; swelling of the arms, genitals and sometimes abdomen; frothy urine.

✓ **Symptoms of orbital cellulitis?**
  - **Why:** e.g. abrupt onset of swelling and redness of the eyelids, proptosis (forward bulging of the eye).

✓ **Symptoms of a stye?**
  - **Why:** e.g. painful , tender, red, swelling of the lid, which after a few days localizes and cures itself spontaneously by discharging pus at the lash base.

✓ **Symptoms of blepharitis?**
  - **Why:** e.g. eyelids have burning, itching with red and sometimes puffy margins, eyelashes may have crusting and scales, discharge or stickiness especially in the morning. If present for years there may be loss of eyelashes or distortion (in-growing) of the eyelashes. There may be a Staphylococcal bacterial infection which can cause severe inflammation with pus-like discharge.

✓ **Symptoms of dacrocystitis?**
  - **Why:** e.g. swelling and redness of the tear sac near the inner corner of the eye.

✓ **Symptoms of Ocular shingles?**

- **Why:** e.g. pain, tingling and numbness around the eye may precede a blistering rash and eyelid puffiness. Fifty percent of people have the eye itself affected with either corneal ulcers, episcleritis or iritis.

✓ **Symptoms of Rosacea?**
- **Why:** e.g. flushing of the face with increases in skin temperature, acne-like rash over the face. May be complicated by blepharitis, conjunctivitis, episcleritis or corneal ulcers.

✓ **Symptoms of trachoma?**
- **Why:** e.g. watering eye, intense redness of the eye, scarring under the eyelids, ulcers on the surface of the eye, eyelid turn inwards and eyelashes scratch the surface of the eye. Trachoma is especially prevalent in outback areas and in aboriginal communities where hygiene may not be adequate.

✓ **Symptoms of trichinosis?**
- **Why:** e.g. 24 hrs after the ingestion of contaminated meat may develop vomiting, diarrhea, abdominal pain and headache then may develop eyelid puffiness, conjunctivitis, photophobia (dislike of eyes for light), fever, muscle pain and muscle spasm.

✓ **Symptoms of Chagas' disease (American trypanosomiasis)?**
- **Why:** e.g. red hard lump at the bite site and enlarged local lymph nodes. If the portal of entry is the conjunctiva, may get unilateral puffiness of the eyelids, conjunctivitis and enlarged neck lymph nodes. May also have fever, transient rash and swelling of the face and trunk.

▪ **Past medical history?**

Why: e.g. Nephrotic syndrome may cause generalized puffiness of the eyelids and may be caused by systemic lupus erythematosus and diabetes; blepharitis may be associated with seborrheic dermatitis, eczema or Rosacea; ocular herpes is caused by a reactivation of varicella zoster virus (acquired from primary infection of chickenpox) sometimes by an underlying malignancy (e.g. leukemia or lymphoma) or immunosuppression (e.g. AIDS infection).

▪ **Medications?**

Why: e.g. many medications such as penicillamine, high dose captopril and gold may cause nephrotic syndrome which can cause generalized eyelid puffiness.

▪ **Known allergies?**

Why: e.g. dust mite, mold, pollens, chemicals - may indicate allergic conjunctivitis or hay fever; allergies may be associated with minimal change disease which is a cause of nephrotic syndrome.

▪ **Travel history?**

Why: e.g. West African trypanosomiasis found mainly in West Africa, Southern Sudan and Uganda and may cause puffy face and puffy droopy eyelids; Lassa fever is confined to sub-Saharan West Africa and may cause puffy eyelids; Trichinosis is found predominantly in the USA and Europe; Chagus' disease is confined to South and Central America.

o. *Back pain*

▪ **When did the back pain start?**

Why: to determine if acute or chronic.

▪ **Did the back pain start after any injury or lifting?**

Why: helps to determine cause of back pain e.g. dysfunction of intervertebral disc , back muscle strain, compression fracture of the spine, spondylolisthesis.

▪ **Nature of the pain?**

Why: may reveal its likely origin e.g. aching, throbbing pain can indicate inflammation such as spondylitis; deep aching diffuse pain can indicate referred pain such as painful menstruation; superficial steady diffuse pain can indicate local pain such as a muscular strain; boring deep pain can indicate bone disease such as bone tumor or Paget's disease; intense sharp stabbing pain superimposed on a dull ache can indicate sciatica.

▪ **Where is the back pain worst?**

Why: is it central or peripheral, thoracic area or lumbar area.

- **Is your back pain worse when you wake in the morning or later in the day?**

Why: Inflammatory pain is worse at night and in early morning; mechanical back pain due to injury is worse at the end of the day and after activity; Continuous pain present day and night is suggestive of infection or bone tumor.

- **Aggravating and relieving factors?**

Why: inflammatory back pain causes pain at rest , relieved by activity ; mechanical back pain due to injury is exacerbated by activity and relieved by rest ;osteoarthritis causes pain with or after activity and relived with rest; pain aggravated by standing or walking and relieved by sitting suggests spondylolisthesis; back pain due to dysmenorrhoea is worse at start of menstrual period.

- **Recent history of gastroenteritis?**

Why: may indicate reactive arthritis.

- **Associated symptoms**

✓ **Back stiffness?**
  - **Why:** if severe, prolonged and worse in the morning indicates inflammation e.g. Rheumatoid arthritis, ankylosing spondylitis; Osteoarthritis causes stiffness at rest.

✓ **Pain, swelling or stiffness in any other joints in the body?**

✓ **Leg pain?**
  - **Why:** may indicate compression of spinal cord or nerve roots from a disc prolapse, narrowed intervertebral foramina or bone tumor.

✓ **Leg paresthesia?**
  - **Why:** may indicate compression of spinal cord or nerve roots from a disc prolapse, narrowed intervertebral foramina or bone tumor.

✓ **Bladder symptoms?**
  - **Why:** should consider the possibility of a spinal cord tumor, cauda equine tumor or kidney disease.

✓ **Fever?**
  - **Why:** may occur in acute vertebral osteomyelitis or tuberculosis.

✓ **Skin rash?**
  - **Why:** psoriasis can cause psoriatic arthropathy.

✓ **Symptoms of Reiter's syndrome?**
  - **Why:** e.g. conjunctivitis, urethritis (painful urination, penile discharge, vaginal discharge).

✓ **Symptoms of Crohn's disease, Ulcerative Colitis or gastroenteritis?**

✓ **Symptoms of Urinary tract infection?**
  - **Why:** may cause loin pain.

✓ **Symptoms of depression?**
  - **Why:** Chronic back pain can increase risk of causing or aggravating depression; Depression can continue to aggravate or maintain the back pain even though the provoking problem has disappeared

- **Past history?**

Why: osteoarthritis (a common cause of back pain is spondylosis (synonymous with osteoarthritis and degenerative back disease) ankylosing, spondylitis, inflammatory bowel disease, psoriasis.

- **Past cancer history?**

Why: of cancers that may spread to bones e.g. breast, lung, prostate, thyroid, kidney, bladder, adrenal, melanoma and colorectal.

- **Sexual history?**

Why: can determine risk of Reiter's syndrome.

- **Risks of Osteoporosis?**

Why: early menopause , premenopausal estrogen deficiency e.g. amenorrhea , cigarette smoking , high caffeine intake , high alcohol intake , low calcium intake , physical inactivity , chronic corticosteroid use, Cushing's disease , hyperthyroidism , chronic renal failure.

- **Medication?**

Why: e.g. warfarin may cause cauda equine compression due to hemorrhage; corticosteroids can lead to osteoporosis.

p. Cold sensitivity

- **How long have you had cold sensitivity?**

Why: to determine if acute or chronic.

- **Dietary history?**

Why: may help detect anorexia nervosa; may help determine risk of iron deficiency anemia.

- **Associated symptoms**

✓ **Symptoms of hypothyroidism?**
  - **Why:** e.g. lethargy, weight gain, constipation, puffiness of face and eyes, hair loss, dry skin.

✓ **Symptoms of anorexia nervosa?**
  - **Why:** e.g. obsessive pursuit of thinness through dieting, extreme weight loss, disturbance of body image, intense fear of becoming fat, loss of menstrual periods.

✓ **Symptoms of trigeminal neuralgia?**
  - **Why:** e.g. brief paroxysms of pain like a burning knife or electric shock on the side of the face precipitated by cold weather or wind, talking, chewing or pressure on certain trigger areas on the face.

✓ **Symptoms of causes of iron deficiency anemia?**
  - **Why:** e.g. heavy periods, rectal bleeding, vomiting blood, melena.

✓ **Symptoms of depression predominantly in the winter months?**
  - **Why:** may suggest seasonal affective disorder. Symptoms of depression usually remit in spring and summer.

- **Past medical history?**

Why: e.g. trigeminal neuralgia may be associated with multiple sclerosis, neurosyphilis or brain tumors; Hypothyroidism may be associated with previous Graves disease, Rheumatoid arthritis, Down Syndrome, previous radioactive ablation of the thyroid.

- **Past surgical history?**

Why: e.g. hypothyroidism may be associated with previous thyroid surgery.

- **Medications?**

Why: e.g. hypothyroidism may be caused by lithium or amiodarone; non-steroidal anti-inflammatory and anticoagulant medications may cause iron deficiency anemia.

q. Cyanosis

- **How long have you noticed that you have cyanosis?**

Why: to determine if acute or chronic.

- **Is the cyanosis central or peripheral?**

Why: Central cyanosis means that there is an abnormal amount of hemoglobin in the arterial blood without oxygen and the blue discoloration is present in parts of the body with good circulation such as the tongue. Peripheral cyanosis occurs when the blood supply to a certain part of the body is reduced e.g. lips in cold weather are blue but the tongue is spared. If central cyanosis is the problem must consider a problem with the cardiovascular or respiratory system.

- **Is it localized or generalized?**
- **If generalized, which areas of the body does it affect?**
- **Is the blueness limited to one limb?**

Why: may suggest an arterial or venous thrombosis.

- **Is the blueness limited to the peripheries?**

Why: (e.g. blue hands and lips) - this indicates a lack of blood supply to those parts of the body and may indicate exposure to cold, Raynaud's disease, Raynaud's phenomenon, peripheral vascular disease, left ventricular failure or shock.

- **If central cyanosis**

Why: e.g. blue tongue, is there a history of drug ingestion? - e.g. potassium chlorate, sulfanilamide and coal tar may cause hemoglobin abnormalities and thus central cyanosis.

- **Is the patient a child?**

Why: certain causes of cyanosis are limited to children e.g. croup.

- **Associated symptoms**

✓ **Blue tongue?**
- **Why:** may indicate central cyanosis which is due to a lack of oxygenated hemoglobin in the blood vessels and thus may indicate high altitude, emphysema, chronic bronchitis, pulmonary embolism, cyanotic congenital heart disease, polycythaemia or hemoglobin abnormalities. Any cause of central cyanosis can also cause peripheral cyanosis and thus blue skin.

✓ **Blue peripheries?**
- **Why:** may indicate exposure to cold, left ventricular failure, shock, arterial obstruction, venous obstruction or any of the causes of central cyanosis.

✓ **Significant shortness of breath?**
- **Why:** should consider a lung or heart origin for the cyanosis e.g. cyanotic congenital heart disease, pulmonary embolism, pulmonary fibrosis, pulmonary emphysema or asthma.

✓ **Stridor?**
- **Why:** may suggest croup, foreign body.

✓ **Symptoms of Raynaud's phenomenon (if blue hands)?**
- **Why:** e.g. sequential discoloration of the digits from pallor to blueness to redness upon exposure to cold. When fingers become red they are painful.

✓ **Symptoms of polycythaemia?**
- **Why:** e.g. ruddy appearance, itch - polycythaemia is a cause of central cyanosis.

- **Past medical history?**

Why: possible causes of Raynaud's phenomenon include rheumatoid arthritis, lupus erythematosus, systemic sclerosis, polyarteritis nodosa, Buerger's disease, polycythaemia, leukemia, polymyositis , dermatomyositis. Central cyanosis may be due to chronic obstructive pulmonary disease, massive pulmonary embolism, cyanotic congenital heart disease, polycythaemia and abnormalities of hemoglobin.

- **Medications?**

Why: beta-blocker blood pressure medications and ergotamine can cause Raynaud's phenomenon; methylene blue which is given in some heart investigations may cause central cyanosis.

- **Cigarette smoking?**

Why: aggravates Raynaud's phenomenon and peripheral vascular disease that can cause peripheral cyanosis. Cigarette smoking can also cause chronic bronchitis and emphysema which can cause central cyanosis.

- **Occupational history?**

Why: vibrating machinery workers are at risk of Raynaud's phenomenon

r. Hair loss

- **How long have you had problems with hair loss?**

Why: to determine if acute or chronic.

- **Is the hair loss focal or diffuse?**
- **If the hair loss is focal, is there a rash in the area of hair loss?**

Why: If rash is present must consider tinea capitis, lupus erythematosus, psoriasis, seborrheic dermatitis. If rash is not present, should consider alopecia areata, syphilis, burns and other injuries to the skin.

- **Is there a family history of male pattern baldness?**

Why: i.e. receding hair line at the front, especially each side which results in an M-shaped recession. Following this, a bald spot may appear on the crown.

- **Is there a family history of female pattern baldness?**

Why: e.g. diffuse thinning of the hair on top of the head.

- **Is there a simple reason for hair loss?**

Why: e.g. normal aging, excessive shampoo or hair drying, excessively tight hair accessories, poor diet.

- **Have you recently been pregnant?**

Why: e.g. hair gets stronger during pregnancy and then falls out after the birth.

- **Has there been recent "crash dieting" ?**

Why: "crash" dieting is a common cause of transient increased shedding of normal hair.

- **Is there a compulsion to pull out one's own hair?**

Why: may suggest trichotillomania.

- **Associated symptoms**

✓ **If female pattern baldness, are there signs of androgen excess?**
  - **Why:** e.g. acne, excess hairiness (of genitals, nipples, abdomen and face), irregular periods, deepening of the voice, enlarged clitoris - may suggest endocrine dysfunction.

✓ **Symptoms of menopause?**
  - **Why:** e.g. hot flushes, night sweats, heart palpitations, lightheadedness, dry vaginal, dry skin, headaches and sometimes diffuse hair loss..

✓ **Symptoms of chronic Vitamin A excess?**
  - **Why:** e.g. bone or joint pain, hair loss, dryness and fissures of the lips, poor appetite, itchy skin, weight loss, low grade fever.

✓ **Symptoms of Hyperthyroidism**
  - **Why:** e.g. preference for cooler weather, increased appetite, heart palpitations, increased sweating, nervousness, irritability, diarrhea, lack of menstrual periods.

✓ **Symptoms of hypothyroidism?**
  - **Why:** e.g. husky voice, tiredness, weight gain, constipation, cold intolerance, loss of hair.

- **Past medical history?**

Why: e.g. hypothyroidism, hyperthyroidism, hyperpituitarism may be associated with diffuse hair loss; vitiligo, hypoparathyroidism, Addison's disease, Hashimoto's disease and myasthenia gravis may be associated with alopecia areata; recent significant medical illness especially if associated with fever is a common cause of transient increased shedding of normal hair.

- **Medications?**

Why: e.g. anticoagulant drug therapy (heparin and warfarin), cancer chemotherapy, some gout medications, some arthritis medications, some antidepressant medications, high dose Vitamin A or retinoids may cause hair loss; discontinuing or changing type of oral contraceptive pill is a common cause of transient increased shedding of normal hair.

s. *Lymph symptoms*

- **How long have you had the lymph symptoms?**

Why: to determine if acute or chronic.

- **What lymph symptoms do you have?**

Why: e.g. swollen lymph nodes, tender lymph nodes or lymphedema (swelling especially in the subcutaneous tissues as a result of obstruction of the lymphatic vessels or lymph nodes and the accumulation of large amounts of lymph fluid in the affected area).

- **If the lymph nodes are enlarged, are they focal or diffuse?**

Why: If enlarged lymph nodes are focal, should look for an infectious process in the area supplied by the respective lymph nodes.

- **Associated symptoms**

✓ **Fever?**
- **Why:** should consider infectious mononucleosis (glandular fever), brucellosis, dengue fever, toxoplasmosis and Still's disease. If fever is absent should consider Hodgkin's disease, chronic myeloid leukemia, polycythaemia, sarcoidosis, secondary syphilis, lymphosarcoma.

✓ **Generalized itch?**
- **Why:** must consider lymphoma.

✓ **Non-pitting edema (skin is not indented when compressed) of an extremity?**
- **Why:** would suggest lymphedema (swelling especially in the subcutaneous tissues as a result of obstruction of the lymphatic vessels or lymph nodes and the accumulation of large amounts of lymph fluid in the affected area).

✓ **Genital ulcers or sores?**
- **Why:** may suggest herpes simplex infection, primary or secondary syphilis, Donovanosis, Chancroid or Lymphogranuloma venereum which may all cause enlarged groin lymph nodes.

✓ **Enlarged occipital lymph nodes (back of head)?**
- **Why:** should consider dermatitis of the scalp, head lice, cellulitis, boil, fungal skin infection or a tick bite. However glandular fever or rubella may begin with enlargement of the occipital lymph nodes.

✓ **Enlarged neck lymph nodes?**
- **Why:** must consider tonsillitis, infectious mononucleosis (glandular fever), tuberculosis, syphilis, toxoplasmosis, sarcoidosis, Hodgkin's disease and malignancy. 80% of malignancies are metastatic squamous cell carcinoma (type of skin cancer).

✓ **Enlarged axillary lymph nodes?**
- **Why:** must consider breast abscess, breast cancer, infections of the arm, tuberculosis, Hodgkin's disease.

✓ **Enlarged supraclavicular lymph nodes (just above the collar bone)?**
- **Why:** must consider lung cancer, cancer of the gastrointestinal tract, infections of the neck, arm, larynx or thyroid.

✓ **Enlarged inguinal lymph nodes (groin)?**
- **Why:** must consider infections of the leg and genitalia, cancers of the genitalia, venereal disease or melanotic sarcoma.

✓ **Symptoms of Non-Hodgkin's lymphoma?**
- **Why:** e.g. painless localized or widespread enlarged lymph nodes, sweating, generalized itch.

✓ **Symptoms of Hodgkin's disease?**
- **Why:** e.g. painless (rubbery) enlarged lymph nodes especially in the neck or axilla, malaise, weakness, weight loss, fever, drenching night sweats, generalized itch, alcohol induced in any enlarged lymph nodes.

✓ **Symptoms of leukemia?**
- **Why:** e.g. tiredness, pallor, fever, small pin-head sized bruises, weight loss, localized infections such as tonsillitis, enlarged lymph nodes, bleeding gums.

✓ **Symptoms of sarcoidosis?**
- **Why:** e.g. shortness of breath, cough, tiredness, joint pain, skin symptoms occur in 10% of cases and may include purple or brown plaques or nodules on face, nose, ears and neck in chronic sarcoidosis. Peripheral lymph node enlargement occurs in 5% of people.

✓ **Symptoms of bacterial tonsillitis?**
- **Why:** e.g. abrupt onset of sore throat, severe throat pain, extreme difficulty in swallowing, pain on talking, foul smelling breath, fever, tender enlarged lymph nodes in the neck.

✓ **Symptoms of infectious mononucleosis (glandular fever)?**

- **Why:** e.g. sore throat, fever, tiredness, poor appetite, aching muscles, skin rash, enlarged tonsils, enlarged neck lymph nodes

- **Medications?**

Why: Most medications may cause enlarged lymph nodes. The most notable is dilantin, but the antibiotics, aspirin, iodides and certain antihypertensive drugs can cause enlarged lymph nodes also.

- **Sexual history?**

Why: may help in determining the risk of syphilis and HIV if generalized lymph nodes enlargement. If localized groin lymph node enlargement consider lymphogranuloma venereum (LGV), chancroid, granuloma inguinale and herpes simplex.

- **Tick bite?**

Why: may suggest Lyme disease or localized lymph node enlargement due to reaction from the tick bite.

- **Contact with animals?**

Why: e.g. cat scratch disease occurs between 7-14 days after a cat scratch or bite and features a small red papule at the site associated with localized lymph node enlargement; Brucellosis often occurs in workers in close contact with infected cattle or goats; toxoplasmosis results from ingestion of foodstuffs contaminated by infected cat faeces.

- **Travel history?**

Why: overseas travelers or visitors may have special or even exotic infections e.g. West Nile fever, Lassa fever, Kala-azar, trypanosomiasis, Lymphogranuloma venereum (usually only seen following sexual exposure in East and West Africa, India, parts of Southeast Asia, South America and the Caribbean), Chancroid (usually only seen following sexual exposure in South East Asia, India or Africa), primary syphilis (rare in urban Australia but must be excluded if suspect this diagnosis, especially if there has been recent sexual contact in South East Asia).

Abdomen - Chapter 15	Student Comments/Questions
(Patient Supine)	
Inspect the abdomen for the following (pp. 524-529):	
Skin characteristics	**Cullen sign** (bluish periumbilical) – intraabd bleeding A pearl like enlarged umbilical node - lymphoma
♦ Venous return patterns	
Contour *(Flat, rounded, or scaphoid)*	**Fs of Abd Distention**: Fat, Fluid, Feces, Fetus, Flatus, Fibroid, Full bladder, False pregnancy, Fatal tumor
Symmetry	
♦ Surface motion	
Inspect abdominal muscles as pt raises head to detect:	
Masses	
♦ Hernia	
♦ Separation of muscles	Borborygmi – loud bowel sound (stomach growling) ↑ bowel sounds → gastroenteritis, early obstruction ↓ bowel sounds → peritonitis,paralytic ileus
Auscultate with stethoscope diaphragm for (p.529):	
♦ Bowel sounds in all four quadrants	
♦ Friction rubs over liver and spleen	**Friction rub**: high pitch, peritonitis over organ from tumor, infect, infarct
Auscultate with bell of stethoscope for the following (p.530):	**Venous hum**: soft, low pitched, occurs w/↑ collateral circulation between portal and systemic venous systems
Venous hums in epigastric area and around umbilicus	
♦ Bruits over aorta and renal, *iliac*, and femoral arteries	
Percuss the abdomen for the following (pp.530-534):	**Liver span**: Lower border: Begin at R MCL over area of tympany, percuss up to determine lower border (dull) – mark border. A lower liver border >2-3 cm below costal margin may indicate hepato-megaly or emphysema. Upper border: percuss on R MCL at area of resonance. Continue down until dull, mark. **Usual Span: 6-12 cm**
Tone in all four quadrants	
Liver borders to estimate span	
♦ Splenic dullness in left midaxillary line	
♦ Gastric air bubble	**Gastric bubble**: Percuss L lower anterior rib cage & L epigastric
Lightly palpate in all quadrants for (pp. 534-536):	
Muscular resistance	
♦ Tenderness	
Masses	
Deeply palpate all quadrants for the following (pp. 536-543):	
♦ Bulges and masses around the umbilicus and umbilical ring	
Liver border in right costal margin	**Gallbladder should NOT be palpable** **Murphy sign**: Have pt take deep breath during deep palpation of gallbladder. If + → pt experiences pain & abruptly halts inspiration.
Gallbladder below liver margin at lateral border of rectus m.	
♦ Spleen in left costal margin	Reach across w/left hand & place it beneath pt over L CVA. Place palmar surface of R hand on pt's abdomen below left costal margin. Press fingertips inward toward spleen as you ask pt to take a deep breath. Try to feel spleen edge as it moves ↓ toward your fingers. Usually NOT palpable. Repeat while pt is lying on the right side w/hips and knees flexed.
♦ Right and left kidneys	Right kidney is more frequently palpable than left. Pg. 542-3
♦ Aortic pulsation in midline	Palpate deep slightly left of midline
Other masses	Stroke each quadrant w/end of reflex hammer up and away from umbilicus and down and away from umbilicus **Reflex ↓** = obese, stretched abdominal muscles due to pregnancy **No reflex** = pyramidal tract lesion
8. Elicit the abdominal reflexes (p.543).	
With patient sitting, percuss the left and right costovertebral angles for kidney tenderness (CVAT) (p. 541).	Ask pt to sit. Use Indirect or direct fist percussion.
Ascites assessment	Percuss for areas of dullness & resonance –dullness in dep parts of abdomen & tympany in upper parts. Mark borders. **Shifting dullness**: Have pt lie on one side, percuss for tympany and dullness, mark borders. Ascites → dullness shifts to dep side **Fluid wave**: Ask pt to press edge of hand along midline, etc.

Chest and Lungs – Chapter 12	Student Comments/Questions
The following steps are performed with the patient sitting	
1. Inspect chest, front & back, note thoracic landmarks, for	
♦ Size & shape (AP diam compared w/transverse diameter)	AP diam usually < transv diam, often by as much as ½ **Barrel chest** : results from compromised resp (chronic asthma, emphysema, cystic fibrosis). Ribs more horizont, spine somewhat kyphotic, sternal angle more prominent.
♦ Symmetry	**Pigeon chest/pectus carinatum**: prominent sternal protrusion **Funnel chest/pectus excavatum**: indentation of lower sternum
♦ Color	
♦ Superficial venous patterns	**Dyspnea** – difficult and labored with SOB **Orthopnea** – SOB that begins or ↑ when pt lies down **Paroxysmal noct dyspnea** – sudden SOB after period of sleep **Platypnea** – dyspnea ↑ in upright posture **Cheyne-stokes** (dying) – periods of ↑ depth interspersed w/apnea **Kussmaul** – rapid, deep, labored **Hypopnea** – shallow respirations (pleuritic pain)
♦ Prominence of ribs	
2. Evaluate respirations for the following (pp.366-369):	
♦ Rate	
♦ Rhythm or pattern	
3. Inspect chest movement w/breathing for (p. 370):	
♦ Symmetry or bulging	
♦ Use of accessory muscles	
4. Note audible breath sounds w/resp (stridor, wheezes)	**Stridor** – obstruction is high in respiratory trea
4. Palpate the chest for the following (pp.371-373):	
♦ Symmetry	Stand behind pt. Place thumbs along spinal processes at 10th rib. Watch thumbs diverge. Loss of symmetry in movement of thumbs suggests a problem. Repeat facing pt w/ thumbs along costal margin.
♦ Thoracic expansion	
♦ Pulsations	
♦ Sensations such as crepitus, grating vibrations	**Crepitus**: crackly sensation; indicates air in subQ tisue from rupture somewhere in resp system or by infection w/gas-producing organism **Pleural friction rub**: coarse, grating vibration, usually on inspiratio
♦ Tactile fremitus	**Tactile fremitus**: palpable vibration of chest wall that results from speech. Best felt parasternally at 2nd ICS (bifurcation of bronchi). **↓ or absent fremitus**: excess air in lungs, emphysema, pleural thickening or effusion, massive pulm edema, bronchial obstruction **↑ fremitus**: presence of fluids or solid mass w/in lungs
5. Perform direct or indirect percussion on the chest, comparing sides, for the following (pp. 373-377):	First: pt sitting w/head bent forward and arms folded in front Then ask pt to raise arms overhead to percuss lateral & anterior chest **Hyperresonance**: emphysema, pneumothorax, asthma **Dullness/flatness**: atelectasis, pleural effusion, pneumothorx, asthma
♦ Diaphragmatic excursion	Remember: diaphragm is usually higher on right 1. Ask pt to inhale deeply and hold 2. Percuss along scapular line until you locate lower border, point marked by change from resonance to dullness 3. Mark point. Allow pt to breath, then repeat on other side 4. W/pt breathing normally, percuss up from marked point & mark at change from dullness to resonance. Repeat on other side. **Excursion distance usually 3-5 cm**
♦ Percussion tone intensity, pitch, duration, and quality	
6. Auscultate the chest with the stethoscope diaphragm, from apex to base, comparing sides for the following (pp. 377-383):	**Vesicular** – ↓ pitched, ↓ intensity, over healthy lung tissue **Bronchovesicular** – moderate pitch & intensity, over major bronchi **Bronchial** - high pitch and intensity, over trachea
♦ Intensity, pitch, duration, and quality of expected breath sounds	**Amphoric breathing**: resembles noise made across bottle mouth, (stiff-walled pulm cavity, tension pneumo w/bronchopleural fistula) **Cavernous breathing**: heard over rigid walled pulmonary cavity
♦ Unexpected breath sounds (crackles, rhonchi, wheezes, friction rubs)	**Crackles** (rales): discont crackling during insp; not cleared by cough **Rhonchi** (sonorous wheeze): loud, low, coarse sounds (like a snore), usually continous, coughing may clear it (mucus) **Wheeze** (sibilant wheeze): musical noise (whistle), continous and louder on exp (if bilateral: asthma, bronchitis, if unilateral: tumor) **Pleural friction rub**: dry, rubbing sound (pericarditis); during insp or exp; loudest over lower lateral anterior surface **Hamman sign**: emphysema
♦ Vocal resonance	**Bronchophony**: ↑ clarity and loudness **Whispered pectoriloquy**: extreme bronchophony (whisper can be heard thru steth) – lung consolidation **Egophony**: ↑ intensity w/nasal quality

Heart and Blood Vessels – Chapter 13

following steps are performed w/ pt sitting & leaning forward, supine, & in L lateral recumbent; these positions are all used to compare findings or enhance assessment.

. Inspect the precordium for the following (p. 430):
- Apical impulse
- Pulsations
- Heaves or lifts

. Palpate the precordium to detect the following (p. 431):
- Apical impulse
- Thrills, heaves, or lifts

. Percussion to estimate the heart size (optional) (p. 433).

. Systematically auscultate in each of 5 areas while patient is breathing ularly and holding breath for the following (pp. 433-441):
- Rate
- Rhythm
- S_1 (closure of AV valves, beginning of systole)
- S_2 (closure of semilunar valves, end of systole)
- Splitting
- S_3 and/or S_4
- Extra heart sounds (snaps, clicks, friction rubs, and murmurs)

. Assess the following characteristics of murmurs (pp. 441-444):
- Timing and duration
- Pitch and intensity (Grade II: quiet but clearly audible; Grade IV: loud, associataed w/thrill) There are 6 grades
- Pattern (crescendo, decrescendo, or square/plateau)
- Quality (harsh, raspy, machinelike, musical)
- Location and radiation
- Variation with respiratory phase

ood Vessels

- Palpate the arterial pulses in distal extremities, comparing characterize bilaterally for the following (p. 444):
  - Rate
  - Rhythm
  - Contour
  - Amplitude *(0: absent, 1: ↓, 2: expected, 3: full, ↑, 4: bounding)*

2. Auscultate the carotid, temporal, abdominal aorta, renal, iliac, and femoral arterial for bruits (p. 449).

3. Measure the blood pressure in both arms, first supine and then, in patients at risk for orthostatic hypotension, standing. (pp. 451-455).

4. With the patient reclining at a 45-degre~ angle elevation, inspect for jugular venous pulsations and distention; differentiate jugular and carotid pulse waves and measure jugular venous pressure (pp. 455-457).

5. Inspect the extremities for sufficiency on arteries and veins through the following (pp. 457-459):
- Color, skin texture, and nail changes
- Presence of hair
- Muscular atrophy
- Edema or swelling
- Varicose veins

5. Palpate the extremities for the following) (pp. 449, 458):
- Warmth
- Pulse quality
- Tenderness along a superficial vein
- Pitting edema

Student Comments/Questions

Apex: L 5th ICS in midclavicular line
Heave or lift = more vigorous apical impulse than expected
Lift along L sternal border: R ventricular hypertrophy
Thrill = fine, rushing vibration, palpable murmur often over base in area of R or L 2nd ICS (valve defect, pulm HTN, ASD)

All Physicians Steal The Money

Aortic: 2nd R ICS at right sternal border
Pulmonic: 2nd L ICS at left sternal border
Second pulmonic: 3rd L ICS at left sternal border
Tricuspid: 4th L ICS along lower left sternal border
Mitral (apical): 5th L ICS at MCL

Pitch: S1 is always ↓ than S2
Loudness: S1 is always ↓ except in mitral and tricuspid areas
Duration: S1 is always longer than S2
S2 split: always greater upon inspiration

Wide splitting: R bundle branch block, pulmonic stenosis, pulmonary HTN
Narrow, no splitting, or paradoxic: L bundle branch block
Fixed splitting: large ASDs, VSD, right ventricular failure)
Paradoxic (reverse) splitting (P_2 1st, splits during exp): L bundle branch block

Mitral valve: only valve w/2 cusps
↑ **S1 intensity:** anemia, fever, hyperthyroidism, mitral stenosis
↓ **S1 intensity:** syst or pulm HTN, mitral disease (rheumatic)
↑ **S2 intensity:** systemic HTN, pulmonary HTN
↓ **S2 intensity:** hypotension, aortic stenosis, pulmonic stenosis

Gallops: best heard w/bell at apex; presystole and intense
Aortic valve ejection click: early systole, intense, radiates
Pulmonic valve ejection click: early systole, less intense

Location of pulses

Carotid: just medial to and below angle of jaw
Brachial: just medial to biceps tendon
Femoral: inf and medial to inguinal ligmanet
Popliteal: pop fossae (pt should be prone w/knee flexed)
Dorsalis pedis: medial dorsum w/foot slightly dorsiflexed
Posterior tibial: behind and slightly inf to medial malleolus

↑ **auscultatory gap:** HTN, severe aortic regurg
↓ **auscultatory gap:** pulsus paradoxus w/cardiac tamponade

If diastolic is >90 or suspect coarctation, measure BP in legs (popliteal) – leg pressures usually ↑, but will be ↓ w/coarctation

Orthostatic hypotension: Hypotension when pt stands erect; (hypovolemia/blood or fluid loss, antiHTN meds). Nl: as pt stands, slight or no ↓ systolic & slight ↑ in diastolic. **Postural/orthostat hypoten: sig ↓ systolic (> 15) & ↓ diastol**

JVP: Raise head of bed until JVPs are seen (45 degree angle). Place ruler w/its origin at mid-axillary line at level of nipple and extend vertically. Place another ruler horizontal in line w/JVP. Vertical distance above level of heart = mean JVP in cm water. **Nl JVP is < 9 cm (study chart on pt. 456)**

Homans sign = flex pt's knee slightly w/one hand and w/the other dorsiflex to the foot (Pain = + = DVT)

Grading edema
1+: slight pitting/2 mm, disappears rapidly,
2+: somwehat deeper pit/4 mm, disappears in 10-15 sec
3+: deep pit/6 mm, may last > 1 minute; dep extremity swollen
4+: very deep pit/8 mm, lasts 2-5 min, dep extremity grossly distorted