BST notes

Medicine

History of presenting illness and chief complaint:

Chief Complaint (CC): It should be in the patient's words. Avoid using medical terminology. I.e. use shortness of breath instead of dyspnea, however, you are supposed to know the medical jargon.

- CC should have a duration (e.g. *for* 2 days), and onset (e.g. *since* sept 7). If duration of 'pain' is very long, ask when did the pain increase even more?
- If there are **several complaints**, arrange them in chronological order. What came first? (e.g. Patient came in complaining of headache, back pain, and weakness in their leg. After taking their history, it was the back pain that first started (herniated disc), which lead to injury of the sciatic nerve secondly (weakness in the legs), in which the patient finally developed a headache from all the pain.
- OR arrange them by duration starting from shortest (e.g. 2 days) to the longest (e.g. 1 week) then ask in detail of each complaint.
- Remember to choose the symptoms that the patient was admitted for (about 2-3 symptoms).
- Other symptoms that are *related* (**NOT** the cause of admission) should be mentioned as an Associated Symptom.
- Other symptoms that are ***NOT** related* at all, should be mentioned in Systematic Review.

Route of admission: ER, referral, clinics/elective *(There is a known medical condition or complaint that requires further workup, treatment, or surgery)*

History of Presenting Illness (HPI): 4 main elements:

- Details of CC (SOCRATES)

Allow patient to describe the pain first before giving him examples. If patient says severity is 9-10/10, ask about their consciousness, and if their sleeping pattern is disturbed or not. If patient

can't describe pain, then it is a 'dull pain'.

- Associated Symptoms in detail (when did it start + chronological order)
- Mention any risk factors (only if it's related to your differential diagnosis)
- Involved systems

If patient complains of sweat, ask for details; do you need to change your clothes? Night sweats?

Cardio and Respiratory:

Ask about **orthopnea** "how many pillows do you use while sleeping? How many did you used to sleep on before?"

Differentiate between **Sleep Apnea** (snores, stops breathing for 2-3 seconds and doesn't wake up from sleep, is sleepy all day), and **PND** (wakes up from sleep because breathing stops, and happens 3-4 hours after sleep)

Absence of chest pain doesn't exclude heart diseases.

Chest pain? Immediately think of Ischemia.

Palpitations? Ask about episodes of dizziness, if they drink coffee/energy drinks (what kind and how often in a day?, ask them to describe their pulse by tapping on the table, how long does the palpitations last for? Are they under stress? Think of arrhythmia.

SOB? Quantitate it by flights of stairs.

Lower Limb Edema indicates high systemic pressure

Intermittent Claudications: ischemia

Hole in the heart? It could be foramen ovale, atrial septal defect, or ventricular septal defect

How to differentiate between **Stable Angina** and **Unstable Angina**?

- **Stable:** disappears with rest or medication. Increases with physical exertion, and usually lasts for a short time
- **Unstable:** occurs even at rest

How to differentiate between Cardiac and noncardiac pain?

Cardiac	Noncardiac
Pain is dull, constricting, crushing	Varies from burning to sharp, stabbing, prickling
Pain is usually central	May be away from the center of the chest, and is usually localized
Radiates to jaw, neck, shoulders, arms	
Triggered/exacerbated by exertion or emotions	Spontaneous, although may be exacerbated by excretion
Relieved by rest and responds to Nitrates	Does not respond to nitrates, or slow response. Relieved by antacids means it could be a gastrointestinal disorder Relieved by leaning forward could be related to pericarditis
Severe SOB, feels suffocated, fainting spells	Systemic review would narrow your ddx whether its respiratory, gastrointestinal, musculoskeletal, psychological

How to tell the difference between coughing that is respiratory-related, and coughing that is cardiovascular-related?

In a cardiac cough, there is a production of clear "frothy" secretions.

When the Respiratory system is involved, yellow and/or green sputum may be present.

GIT:

Diarrhea? Think about IBD (very common in KSA). Some of the things to ask about: colour, smell, quantity, duration, pain severity, amount, flushes or not, steatorrhea, blood, mucus, and if it wakes her up.

Causes: Oral/genital ulcers, crohn's, GERD, heartburn, chronic pancreatitis, hyperthyroidism, electrolyte disturbance.

A useful mnemonic that refers to the either small/large intestines and the quantity of stool is: Big bowel → small stool, Small bowel → big stool

Past medical and surgical history:

If the patient had a similar previous episode of his CC, you have to ask and report it in detail. It's not very important to ask about details in non significant diseases if it was a very long time ago e.g. 20 years.

For any chronic disease, ask about: onset, complications, drugs, and if it's controlled.

When taking Medication History, ask about NSAIDs and Oral Contraceptive Drugs, because many patients don't consider them as medication.

If the patient has Diabetes Mellitus (DM), their admission to the hospital may be due to DM complications, e.g. Kidney Failure. It's important to ask these questions:

When were they first diagnosed? Where do they follow up (hospital, someone at home, by themselves)? Is it controlled or not(you can find out by measuring HBA1C)? What medications do you take?

Taking medication does not necessarily mean it is controlled; **complications** of poorly/uncontrolled DM:

- **Retinopathy:** any vision changes? Cataract? Have you done any laser surgeries?
- **Nephropathy:** any known kidney disease? What are the measurements of urine protein and serum creatinine levels?
- **Neuropathy:** Numbness (some describe it like they're wearing socks or gloves), neuropathic ulcers
- **Vasculopathy:** does the patient has hypertension?

An important side effect of insulin is hypoglycemia

Family and social history:

Smoking: some patients may not be honest with you. Explain to them why it's important to know, e.g. to find the accurate diagnosis, and managing the best treatment.

Smoker → How long and how many packs/day? What is his pack-year?

> *It is calculated by multiplying the number of packs of cigarettes smoked per day by the number of years the person has smoked.*

Ex-smoker → When did you quit? How many years of smoking? Packs/day?

Secondary Smoker → How often?

Know that smoking may lead to Squamous Cell Carcinoma

Drinking: Say the person drinks alcohol, but *don't* say he is alcoholic unless he is *addicted,* then asses his drinking based on the 'CAGE CRITERIA'.

1. Have you ever felt you needed to **C**ut down on your drinking?
2. Have people **A**nnoyed you by criticizing your drinking?
3. Have you ever felt **G**uilty about drinking?
4. Have you ever felt you needed a drink first thing in the morning (**E**ye-opener) to steady your nerves or to get rid of a hangover?

Disabled Patients: Who is their support system? (Who takes care of them? Do they live in the ground floor?)

Ask "does this affect your daily routine/work?" → it gives you a clue about the severity of the symptoms

Common DDx:

Chest pain + Shortness of breath (SOB) + cough → **Heart Failure**

Stage 1	No symptoms and no limitation in ordinary physical activity
Stage 2	Mild symptoms (mild SOB and/or angina), slight limitation in ordinary activity
Stage 3	Marked limitation in activity due to symptoms, even during less than ordinary activity, e.g. walking short distances (20m). Comfortable only at rest
Stage 4	Experiences symptoms even while at rests. Mostly bed-bound patients.

High grade fever + productive cough; yellowish sputum → **Pneumonia →** If untreated, pleural effusion can happen, then SOB takes place

Dry cough, acute SOB (episodic, and is usually a disease of childhood) → **Asthma**

SOB + cough → **COPD**

Rheumatic Heart Disease (RHD): usually occurs in young age (20-30)

Lower Limb Swelling → **HF, Pulmonary HTN, Chronic Kidney Disease (CKD), nephrotic syndrome, adverse drug reaction**

Other:

Age and gender are very important for your DDx. CVD is more common in male than females, while Autoimmune diseases are more common in female. During physical examination, female patients should be examined in the presence of a nurse.

To confirm diagnosis of TB, order a Acid Fast Bacillus (AFB) sputum test.

Always mention positive findings first before the negative.

Mention the negatives, because if you don't mention them, the doctor will consider that you did NOT ask about it.

Warfarin starts working after 3 days, so a physician would prescribe heparin until warfarin takes action.

When presenting, you can mention the headings, i.e. (As for HPI…, upon systemic review…)

In **SYSTEMATIC REVIEW:** don't mention the system involved again, and don't just say "nothing significant/nothing remarkable". You're expected to say the main negative findings, i.e. no headaches, no weakness in limbs. No Diarrhea, no nausea. Etc. You don't have to ask about everything, but at least the major symptoms related to that system.

In **CASE SUMMARY:** mention personal information - more importantly: name, age, and gender. Your HPI should include the MOST important positive and negative findings, then mention your DDx

Panic Attack should be the last thing you think about after excluding other DDx. Symptoms of a panic attack include: tachycardia, feeling weak, dizziness, tingling or numbness in the hands/fingers, sense of terror/death, headaches, blurred vision, sweat, chills, chest pain, difficulty in breathing, loss of control, increase in respiratory rate.

BST notes

Surgery

History of presenting illness and chief complaint:

General:

Migratory pain: the pain will stop at one site, and then start at another site. The pain wouldn't be felt at both sites simultaneously.

Radiation pain: pain will not stop at the first site, and it is going to affect even more sites. The pain will be felt at both sites or even multiple sore simultaneously.

Intermittent means that the patient is sometimes completely normal and other times is abnormal. While **fluctuating** means that it has ups and downs but it's not completely normal at any time.

To assess severity ask if it affects the daily activities or not.

Cardio and Respiratory:

Patients don't always mention that they had intermittent claudication due to lack of activity.

When a patient has orthopnea you should focus more on the cardiac side rather than Respiratory.

Acute limb ischemia: they mostly don't have PAD. it's usually from other medical condition ex: AFib. they don't have collaterals that's why the pain is so severe.

Venous pain: When standing. relieved by walking.
Arterial pain: When walking, relieved by standing.
Usually people wouldn't go to hospital if one of their hands is affected and they'll just use the other. Consequently, those who have peripheral arterial disease of lower limbs will seek medical help more than those who have peripheral arterial disease of upper limbs.

Remember when grading heart failure the New York heart association classification.

How to differentiate between cellulitis and dependent rubor caused by PAD on the leg?
if its cellulitis, redness won't disappear if you lift the leg, as for dependent rubor, redness will disappear with leg elevation

---

GIT:

Usually the GIT symptoms start in umbilicus area then shift to anatomical site of the affected organ.

Appendicitis pain starts as a visceral pain and then shifts to become a somatic pain when the parietal peritoneum becomes involved with the inflammatory process.
*Note that this shift is migratory not radiating.

visceral vs somatic pain:
visceral: vague pain in the periumbilical region.
somatic: stabbing pain in the right lower quadrant.

The 4 alarming symptoms of Bowel obstruction:
- Abdominal pain
- Obstipation "complete constipation" with lack of flatus "passing gas"
- Distension
- Nausea and bilious vomiting "green vomiting due to bile reflux"

Plastic:

Muscle atrophy in the hand would usually indicate nerve damage while swelling would indicate infection.

The most common lump in the wrist tendon is (Ganglion).

Hepatobiliary:

Acute cholangitis: is a bacterial infection superimposed on an obstruction of the biliary tree most commonly from a gallstone, but it may be associated with neoplasm “tumor at the head of pancreas” or stricture. The classic triad of findings is right upper quadrant (RUQ) pain, fever, and jaundice.

-Biliary colic : constant pain for 1-5 hours
-Acute cholecystitis: pain is prolonged > 6h. or days

Past medical and surgical history:

In females some anti-coagulants are teratogenic. So ask if she takes warfarin in the first trimester and before labor.

patients with metal valve say they sometimes hear a quiet clicking sound in their chest. this is just the sound of the new valve opening and closing, and its nothing to be worried about. in fact, it is a sign that the new valve is working the way it should.

Family and social history:

Patient's family name might be important to recognize some genetic diseases that are common in certain families.

Also the patient's region and occupation. For example, a patient from japan came with hematuria may indicate schistosomiasis.

- Asbestos -> Mesothelioma
- Aromates -> TCC
- Radiologist-> in risk for many cancer (squamous cell carcinoma, thyroid cancer…)
- Doctors-> corona (MERS-CoV)
- Labs -> risk for HIV, Hepatitis

Remember to respect the patient's privacy especially when you ask about smoking or alcohol, it's better to ask if he/she sits with smokers than asking him/her directly if he/she smokes even if the patient is not a smoker don't forget to ask if he/she used to smoke.

Common DDx:

The most common DDx of radio-femoral delay? **Aortic coarctation**.

DDX of Pleuritic chest pain with breathing: 1. Pneumothorax. 2. Pneumonia.3. Pericarditis

Other:

Seriousness of the condition should not be determined by the history or physical examination **only** we need to do further investigations “lab, imaging, etc”

Before any surgical procedure we need to make sure that the patient is fit or suffering from any other condition “uncontrolled diabetes, hypertension or bleeding tendency”

In images we don’t say if it’s benign or malignant just say it’s a mass.

In systematic review don’t say that GI is normal mention all the symptoms you asked about for example no vomiting, no diarrhea, etc. especially if he had a chronic disease related or surgical procedure.

all diseases may lead to a systemic effect so avoid “tunnel vision” when assessing the Patient.

Be objective when you write the history
- For example: When describing the amount don’t use small, little, huge try to describe it in ml or cup or any other measurement
- Another example is the color, when the patient says “Dark” greenish try to know exactly how is the color like? is it similar to my scrub’s color or is it similar to my notebook or anything that could help you.

complications depend on the anatomy of the appendix:
if it’s retrocecal(most common) -> local inflammation
if it’s pelvic -> peritonitis

Notes were taken by:

Noura Alaqeel
Lamya Alsaghan
Mona Almuteb
Samar Alotaibi
Reema Altuwaim
Ghadeer Asiri
Muneera Alhusaini
Asrar Batarfi
Alanoud Alomair
Noura Albusayes
Luluh Alzeghayer
Noura Alfehaid
Malak Alshareef
Hesham Alghofaili
Abdulaziz Alghanaym
Ammar Almansour
Adil Alshehri

Team leaders: Abdulaziz Alhammad , Farrah Mendoza

Please fill out this survey regarding our work: https://goo.gl/forms/Ck9NsYMAmn2DzThA2