OSCE Focused history
For
Pediatrics

The 6th edition

By AAF Group

For HU students

Index

1. History for convulsions with fever (febrile convulsions)

Any child from 6 months – 6 years presented with convulsions ask first about fever …

1. Was there a fever? (duration, degree, and progression)
2. Duration of the convulsion
3. Describe the convulsion:
   - All the body or specific regions
   - Clonic (rhythmic contractions and relaxations), tonic (rigid), atonic (flaccid relaxation), or combination of them.
   - Loss of consciousness and eye staring or up rolling.
   - Cyanosis, tongue biting, foaming and incontinence.
   - When and How it ended (spontaneously or with medications)
   - Status after the convulsion ended
4. Causes of fever:
   - Meningitis (vomiting, headache, photophobia, rash and hypoactivity)
   - OM (ear discharge and pain)
   - Respiratory (cough, sputum, distress, poor feeding// sore throat, nasal congestion and rhinorrhea …)
   - Gastroenteritis (diarrhea, abdominal distention, pain and blood in stool (shigella)
   - UTI (frequency, dysuria, and blood)
   - Arthritis (joint swelling or pain)
   - Skin infections OR TRAUMA that may've caused skin infection.
   - Chronic or systemic conditions like TB (anorexia, weight loss, night sweats, and living with elderly (TB))
   - SLE, rheumatoid diseases and Rheumatic fever _only ask about these in case there was arthritis in your history (sore throat within 30 days, malar rash, painless mouth ulcers, and photosensitivity)
   - Recent drug intake
   - Recently taken vaccine and vaccination history
5. Has there been contact with another family member or friend that had fever or infection??
6. Previous attacks and the diagnosis of those
7. Is there a Family history of febrile convulsions or epilepsy?
8. If the patient is neonate, ask about risk factors in perinatal history (premature, maternal fever, maternal UTI, and prolonged rupture of membranes)

2. History for convulsions without fever (or loss of consciousness)

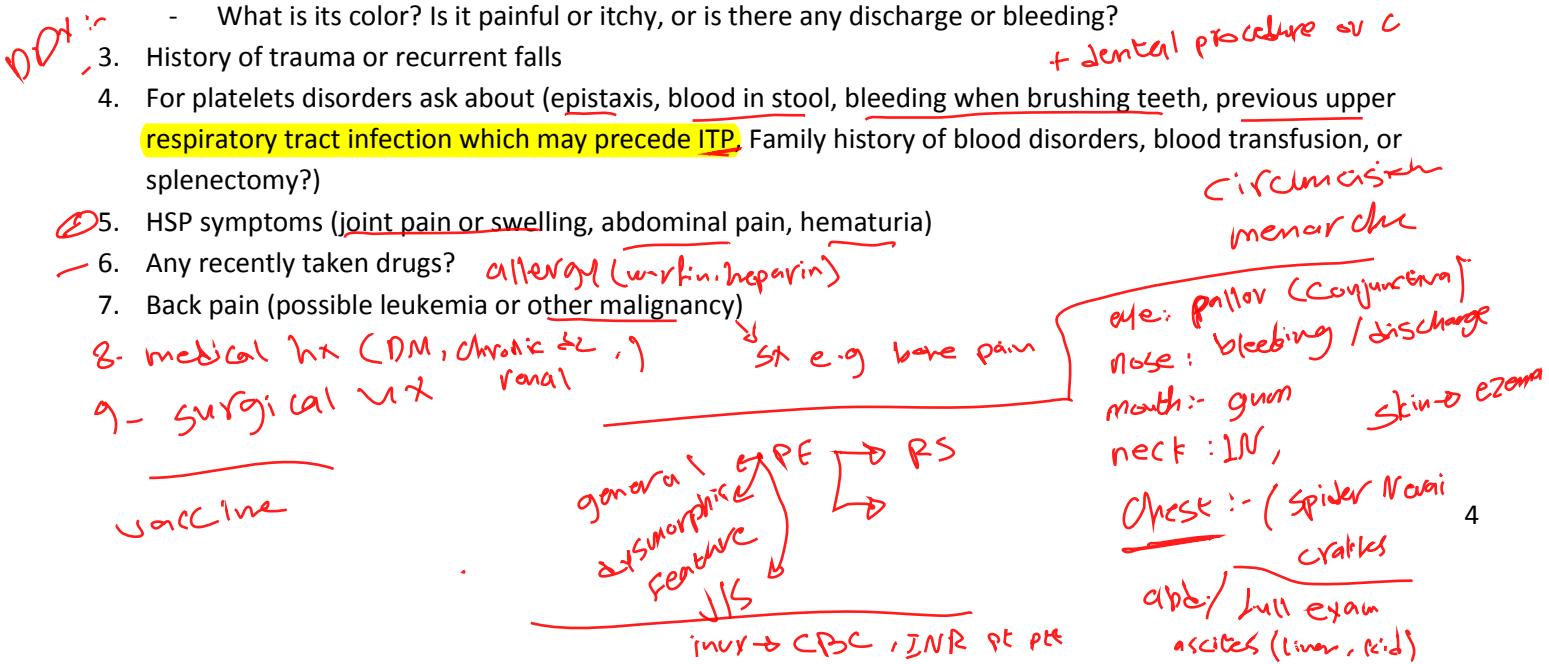
The patient will present either with abnormal movements or abnormal sensations …

1. Was there a fever? NO
2. Duration, and is this the first time? If no, then how frequent the episodes occur?
3. Describe the convulsion or the loss of consciousness episode
    - Abnormal movements of all the body or specific regions? Or wasn't there an abnormal movements?
    - If there is abnormal movements: Clonic (rhythmic contractions and relaxations), tonic (rigid), atonic (flaccid relaxation), myoclonic(contractions of muscles), or combination of them.
    - Abnormal sensations like numbness or pain
    - Loss of consciousness and eye staring or up rolling.
    - Cyanosis, tongue biting, foaming, incontinence.
    - How it ended (spontaneously or with medications)
    - Status after the episode ended or postictal period (headache, drowsy, sleeping or comatose)
    - What was he doing before the episode (sitting, standing _orthostatic hypotension_, moving…)
    - Preceding symptoms or aura (sweating, nausea, headache, dizziness, vertigo, visual disturbances, palpitations, chest pain or dyspnea _considering heart and respiratory diseases_)

4. History of head trauma
5. Hyponatremic Dehydration (thirsty, oliguria, dry mouth, and absent tears.
6. Good feeding? (hypoglycemia may cause seizures or hypoglycemic attack)
7. Is he a known case of epilepsy, asthma, or heart disease? Is there a Family history of epilepsy or sudden death (heart disease)?
8. Medications being taken
9. Pre- and peri-natal history (complications and drugs during pregnancy, delivery complications and prematurity, ICU admission)

3. History for Bruises

1. Since when? And is this the first time to have such problem?
2. Describe the bruises
    - Distribution and progression (where started, and to where extended, time between changes in location, and if ever disappeared completely?)
    - What is its color? Is it painful or itchy, or is there any discharge or bleeding?
3. History of trauma or recurrent falls
4. For platelets disorders ask about (epistaxis, blood in stool, bleeding when brushing teeth, previous upper respiratory tract infection which may precede ITP. Family history of blood disorders, blood transfusion, or splenectomy?)
5. HSP symptoms (joint pain or swelling, abdominal pain, hematuria)
6. Any recently taken drugs?
7. Back pain (possible leukemia or other malignancy)



4. History for Fever

1. Duration
2. Describe the fever
   - Degree (the highest), where measured and by whom?
   - Progression (remained as it is, increased, decreased, or fluctuates??)
   - Is there a specific time for increased degree (night, morning, or day??)
   - Did it respond to medications (or treatments), and what are the medications (or treatments) given??
   - General associated symptoms especially in infant (convulsions, malaise, poor feeding, activity, and sleeping pattern)
3. Causes of fever
   - Meningitis (vomiting, headache, photophobia, rash and hypoactivity)
   - OM (ear discharge and pain)
   - Respiratory (cough, sputum, distress, poor feeding // sore throat, nasal congestion and rhinorrhea …)
   - Gastroenteritis (diarrhea, abdominal distention, pain and blood in stool (shigella). If those presents ask about dehydration signs (thirst, absent tears, and oliguria)
   - UTI (frequency, dysuria, and heamturia)
   - Arthritis (joint swelling or pain)
   - Skin infections, OR TRAUMA that may have caused skin infection.
   - Chronic or systemic conditions like TB (anorexia, weight loss, night sweats, and living with elderly (TB))
   - SLE, rheumatoid diseases and Rheumatic fever _only ask about these in case there was arthritis in your history (sore throat within 30 days, rash, malar rash, painless mouth ulcers, and photosensitivity)
   - Has there been recent drug intake (drug allergy)??
   - Vaccinations are important as well in any case with possible infection.
4. Has there been contact with another family member or friend that had fever or infection??
5. Signs of dehydration (thirsty, dry mouth, absent tears, oliguria, and level of consciousness)
6. Previous episodes?? What was the diagnosis of those previous episodes??
7. If the patient is neonate, ask about risk factors in perinatal history (premature, maternal fever, maternal UTI, and prolonged rupture of membranes)

***if any focus of infection found, take more history about it.

5. History for any symptom with fever in up to 3 month infant (poor feeding, irritability, vomiting, cough, diarrhea, ear discharge, jaundice, cyanosis …)

Take **full history for that symptom**, then take **full fever history** like the one above. That's because an infant up to 3 months has nonspecific symptoms for infections, as meningitis may present with diarrhea and jaundice and others. In addition, in this age group, sepsis is very common. Don't forget **the perinatal history**.

6. History for cough

1. Duration (less than 3 weeks is acute), and if there were previous similar attacks?
2. Describe the cough
    - Quality and severity?
    - Dry, or sputum and blood (hemoptysis)? (If there is sputum ask about color, amount, and blood)
    - Continuous or bouts of cough?
    - Are there specific times of exacerbation?
    - Any aggravating (exercise, cold, drugs, or after foods in TEF) or relieving factors (sleep)?
    - Associated cardio-respiratory symptoms (difficulty breathing or noisy breathing, wheezes, cyanosis, chest or upper abdominal pain _not in infant please_, palpitations, loss of consciousness, limb edema, and malaise), and in infant add (poor feeding, sleeping patterns, and failure to thrive)
3. Respiratory infections, ask about fever plus:
    - Pneumonia and bronchiolitis (contact with another chest infection or similar case, or recent URTI)
    - Croup and upper RTI (hoarseness, stridor, nasal congestion & discharge, and sore throat)
    - Vaccination
4. Foreign body aspiration (choking with cyanosis, and ask if he plays with small objects)
5. *Lung diseases*
    - *Asthma* (past or family history of allergy and asthma, pets, smoking in home, and ventilation)
    - *Cystic fibrosis* (chronic diarrhea, steatorrhea, not gaining weight, and family history)
    - *GERD* (food regurgitation and heart burn)
    - *TB* (weight loss, night sweats, elderly living in the house)
6. *Sinusitis and allergic rhinitis* can cause morning cough due to secretions accumulation during night. (ask about headache and facial pain)
7. Congenital heart disease (past and family history of CHD)
8. Drugs taken as ACEI.
9. If the patient is infant, ask about perinatal history (caesarean section, twins, asphyxia, maternal infection like fever or UTI at birth, prematurity and birth weight).

7. History for chronic cough OR recurrent chest infections

This is the same as the acute cough history above, but ***focus should be on the diseases marked red (in italic),*** as those are the most common cause of recurrent chest infections or chronic cough.

Add to them: 1. *steroids intake* and immunosuppression (ask about chronic diseases and recurrent infections)

2. Add to perinatal Hx (drugs intake during pregnancy)

8. History for arthritis (joint pain)

1. Since when? And were there previous attacks?
2. Describe the pain
    - What are the exact joints involved (consider in mind symmetrical or not)? Did the pain relieve a joint to involve another (migratory)
    - Character of the pain.
    - Sudden or gradual? Constant or intermittent? (if intermittent ask about frequency and time intervals) And severity (mobility limitation or limping))?
    - Aggravating and relieving factors (medications, flexion of joint …)
3. Recent trauma
4. Septic arthritis (fever, chills, fatigue, and joint swelling)
5. juvenile idiopathic arthritis, SLE and other rheumatoid diseases (all rheumatoid dis: fever, weight loss, anorexia, rash, visual disturbances, morning stiffness// SLE: butterfly rash, photosensitivity)
6. Rheumatic fever _especially in migratory arthritis_ (recent sore throat, skin nodules, chest pain, and palpitations)
7. HSP (lower limb bruises, abdominal pain and hematuria)
8. FMF (family history of FMF, constipations and diarrhea)
9. Inflammatory bowel disease (blood in stools, diarrhea, mouth ulcers, visual disturbances, and family history of IBD)
10. Brucella (intake of unpasteurized milk, contact with animals)
11. Hemophilia (bleeding tendency, family history of bleeding disorders)

9. History for vomiting

1. Since when? And were there previous episodes?
2. Analyze the vomiting
    - Describe the vomitus (color & blood, amount, and if projectile)
    - How many times per day? Or just after food? Anything else induces the vomiting?
    - Was it preceded by nausea?
3. Signs of dehydration and patient status (thirsty, dry mouth, absent tears, oliguria, and level of consciousness) and if the mother hydrated him.
4. GIT symptoms:
    - *gastroenteritis* (Fever, diarrhea, and if he has eaten something specific that day)
    - *GI obstruction* (Abdominal pain (analyze if present), did the vomiting relieve the pain, abdominal distention, constipation, and abdominal surgeries)
    - *hepato-biliary diseases* (Jaundice, blood in the stools, dark urine, and anorexia)
    - *GERD* (Food regurgitation and heartburn)
5. Rule out meningitis and other brain compressing lesions
    - Child: headache, photophobia, consciousness, and rash
    - Infant: poor feeding, irritability, hypoactivity, and rash
    - Newborn: poor feeding, irritability, change in sleeping pattern, respiratory distress or cyanosis, jaundice, in addition to rash
6. Ask if there was *Head trauma* may cause brain concussion and bleeding causing compression symptoms like above.
7. Rule out chest infections and otitis media as common causes of vomiting in pediatrics age groups (cough, difficulty breathing, chest pain, and ear discharge),
8. Renal diseases like GN, renal failure, and UTI may cause acidosis and uremia resulting in vomiting (hematuria, oliguria, previous sore throat, dysuria and frequency)
9. DKA especially if the patient does have abdominal pain and urinary frequency. (ask if the patient has thirst, past or family history of diabetes)
10. Ask about drugs (analgesics and the antiepileptic drug theophylline)
11. If patient is neonate, ask about perinatal history and passage of meconium.

10. History for diarrhea

1. Since when? And were there previous episodes?
2. Analyze the diarrhea
    - Onset and how frequent he passes stools?
    - Describe it (fluidity, contents _blood, mucous, or fatty_, in addition to amount)
3. Signs of dehydration and patient status (thirsty, dry mouth, absent tears, oliguria, and level of consciousness) and if the mother has hydrated him.
4. Gastroenteritis and hepatic diseases (fever, abdominal pain, nausea and vomiting, has he eaten something? Travel history, jaundice, and dark urine)
5. Did he take any antibiotics?? This very common cause of diarrhea
6. Malabsorption diseases:
    - All of them may cause (abdominal distention, flatus, malaise, weight loss or failure to thrive)
    - Inflammatory bowel disease (arthritis, oral ulcers, and visual disturbances)
    - Cystic fibrosis (family history, chronic cough, breathlessness, and recurrent chest infections)
    - Lactose intolerance (association with milk, and family history)
    - Celiac disease (are the above symptoms related to wheat and grains? Is there a family history of celiac disease?)
    - Post-surgical (recent surgeries)
7. Hyperthyroidism (heat-intolerance, sweating, and palpitations)
8. Irritable bowel syndrome (does the diarrhea alternate with constipation), don’t ask this in acute first time diarrhea.
9. Poor living conditions

11. Provide counseling for woman on feeding her newborn baby up to 2 years of age.

1. Beast milk is recommended to be the sole source of nutrition until 6 months of age, it's better than other formulas in that it protects your baby from infections as it transfer to him immunity from you, it also protects him form most food allergies, it is also more comfortable as it doesn't need to be prepared, warmed, and it's free from microorganisms. It is also better for your health. You should also continue to breastfeed him for at least 1 year, then as long as you desire.
2. If breast engorgement occurs, and becomes painful, then apply warm or cold compressor to breast before feeding and use hand-expression to express the milk, because not doing so may lead to lactation failure.
3. You have to offer both breasts as long as the baby remains at the breast, and at each feed the first breast offered should be alternated. During the following weeks, if the infant remained 4 hours since the beginning of the last feed without demanding, then he should be aroused to feed.
4. To assess the adequacy of breast feeding, your infant should be voiding 6-8 times per day (the voiding should soak the diaper not only wetting it), and from by the 5^{th} to 7^{th} day he should be passing stools (yellow unformed) at least 4 times per day. And more important, you should monitor his weight gain, this may be done in follow up visits 5 days and 2 weeks from now. During the next weeks you should be feeding him 8-12 times a day to ensure adequate feeding.
5. Ask if she is taking drugs, some drugs are contraindications to breastfeeding (radioactive, antimetabolites, lithium, certain antithyroids, and illicit or recreational drugs). Smoking is not contraindications but better be avoided.
6. You should never give him any semisolid foods before 3-4 months of age as he may aspirate.
7. By 6 months, you better start introduction of semisolid foods, gradually, one ingredient every week or two, to detect possible allergy to any. If he is breast fed, then best foods are those rich with iron, zinc, and protein, including iron and vitamins fortified dry cereals that better be mixed with milk or water. If they prefer to prepare food in home, they should safely handle it and avoid flavoring like salts.
8. THINGS TO AVOID:
   - Avoid giving him juices before 6 months of age, after that don't give him more than 100g/day, and don't give it in bottle, use cup instead.
   - Never put him to sleep with bottle or cup filled with juice or milk, to avoid infant bottle tooth decay.
   - Never give him cow milk (not cow milk formula) before 1 year of age, to avoid occult GIT bleding
   - It is better to avoid food with high allergy potential until 4 years of age (peanut, eggs, and fish)
9. After 1 year of age, toddlers shouldn't be given milk more than 600g daily in order to let space for other nutrient-rich foods. And he should be eating regular meals and snacks with family, and encourage him to self-feed.

12. History for headache

1. Since when? And is this the first time??? (important because new pain that is severe require prompt imaging, while recurrent episodes of headaches usually benign)
2. Analyze the headache:
    - Character and site with radiation (migraine is *throbbing unilateral or bilateral temporal*, tension headache is *pressing bilateral*, headache associated with infections is *diffuse*)
    - Sudden or gradual onset? Persistent or intermittent? If intermittent, determine duration and frequency of episodes. And in both situations, ask about severity and if this severity changes with time (changing severity prompt attention because increasing severity overtime could be due to tumor).
    - Is there a specific time for maximal pain? (*morning pain* could be due to increased ICP as in tumor and hydrocephalus, and pain due to sleep apnea may also be *every morning that resolves in 30min*, *evening pain* may be due to visual problems)
    - Aggravating factors (*caffeine, fasting, stress, and activity* could provoke migraine, while coughing, *straining, bending and sneezing* could be due to increased ICP like in tumor and hydrocephalus)
    - Relieving factors (*sleeping in dark quiet room* relieves migraine, *analgesia* may relieve several types of pain)
3. Ask about CNS symptoms to rule out serious neurological problems like increased ICP, tumors, hemorrhages, severe trauma and infections, any of these symptoms require imaging and further evaluation.
    - Any limb weakness or paralysis, abnormal movements_seizures_, diplopia, vertigo, ataxia, and dysarthria.
    - Dizziness and partial or complete loss of consciousness.
4. Meningitis (fever, rash, nausea, vomiting, and photophobia, in addition to any of the CNS sympoms)
5. Migraine also presents with nausea, vomiting, photophobia, so ask further about symptoms that may precede the pain _aura_:
    - Visual symptoms (ask if he sees spots, flashes and lines)
    - Sensory (numbness and paresthesia)
    - Motor (unilateral weakness), note that he may have already told you this when you asked CNS symptoms.
    - Ask about *family history* of migraine.
6. History of trauma (headache may be post-concussive, and may be due to hemorrhage from severe trauma especially if there were CNS symptoms)
7. Headache may be due to systemic infections, so ask quickly about possible focuses of infection (ear discharge, runny nose, sore throat, cough, diarrhea, dysuria, joint pain or swelling, and ask if he took his vaccines)
8. Sinusitis (facial pain, teeth pain, and if he feels mucous in his pharynx in the morning)
9. Ask if he is taking drugs, many do cause headache as side effect.
10. Ask if he put a lot of strain on his eyes like excessive reading or computer using (this most commonly present with frontal headache)
11. If you still have time, and the pain was chronic, progressively increasing, and associated with CNS symptoms, then ask if he had history of tumors anywhere in the body, and if he has family of history tumors.

13. History for Red Urine (or blood in urine)

1. Since when? And were there previous similar attacks before?
2. Describe the red urine:
    - Exact color (*brown or cola color* indicates glomerular problem, while *bright red or pink* color indicates lower UT problem like cystitis and urethritis), and whether this color appears during whole urination or just at the beginning or end
    - Any extra contents? (clots, stones)
    - Aggravating factors (like exercise)
3. Lower UTI (painful urination, suprapubic pain, frequency, nocturia and urgency) and lower tract stones or obstruction (hesitancy, intermittency, and oliguria)
4. Upper UTI and renal stones (fever, flank pain, nausea, vomiting, anorexia, malaise and *history of previous or recurrent UTI*)
5. Trauma
6. GN
    - Poststreptococcus GN (history of sore throat or skin infection during the past month)
    - IgA GN (upper RTI like congestion and coryza during the past 2 days, and peri-orbital or elsewhere swelling)
    - SLE or lupus nephritis (malar rash, painless oral ulcers, photosensitivity _skin reaction to light_ and chest pain)
    - HSP (lower limb rashes or bruises, joint swelling or pain, and abdominal pain)
7. Bleeding disorders (easy bleeding like when tooth-brushing, epistaxis, past and family history of bleeding disorders or blood transfusions)
8. HUS and other hemolytic disorders like G6P def and sickle cell anemia
    - Shiga toxin-associated HUS (history of *bloody diarrhea and abdominal pain within the last 10 days*, in addition to history of *farm or zoo visit*, and history of ingestion of *undercooked burger or unwashed fruits*)
    - Pneumococcal HUS (history of *chest infection* with cough and dyspnea during the *last 10 days*)
    - Ask about (jaundice, past and family history of sickle cell anemia and G6P def)
9. Wegener granulomatosis or goodpasture syndrome (hemoptysis, nasal ulcers and bleeding, weight loss, and night sweats)
10. Alport syndrome an X-linked GN (hearing loss, family history of hematuria, and family history of renal failure or transplant)
11. Congenital kdiney disease (only ask about past history of kidney disease)
12. Ask about drug intake and special foods.

14. History for wheezes

*note: history for wheezes is very similar to cough, the difference is in priorities, the key here is to differentiate between asthma and bronchiolitis from the beginning by knowing that bronchiolitis is usually first time and may be with mild fever, while asthma is diagnosed after repeated episodes, however, even if this is the first time to happen, you have to ask about asthma history and risk factors.

1. Since when? And have there been previous attacks?
2. Analyze the wheezes:
    - Sudden or gradual? Persistent or intermittent? If intermittent then describe frequency and duration of episodes.
    - Any specific time for more severe wheezes (*night* may indicate asthma, *morning* may indicate GERD)
    - Aggravating and relieving factors (*cold, activity, and crying* all may be associated with asthma, *after food* may indicate aspiration or laryngeal compromise)
    - Associated cardio-respiratory symptoms (chest pain, difficulty breathing, grunting, cough, sputum, cyanosis, palpitations, and leg swelling) and in infants add (poor feeding, sleeping, and failure to thrive)
3. Bronchiolitis and pneumonia (recent upper RTI, fever, contact with other cases of upper RTI or chest infection) *bronchiolitis occurs in under 2 year-old infants.
4. Lung diseases:
    - Asthma (past or family history of allergy and asthma, pets, smoking in home, ventilation, treatments tried _this is important, because chronic wheezes that don't respond to asthma treatment may be due to foreign body_)
    - GERD (regurgitation and heartburn)
    - Cystic fibrosis (chronic diarrhea, steatorrhea, not gaining weight, and family history)
    - TB and chronic debilitating illnesses (weight loss, malaise, night sweats, elderly living in house, and vaccination)
5. Foreign body aspiration (choking, and ask if he plays with small objects)
6. Drug history and allergy
7. Past history of Congenital heart and lung diseases, and perinatal history (the cause may be due to bronchopulmonary dysplasia)
8. In chronic case only ask about Immunosuppression (ask about steroids intake and chronic diseases like DM)

15. History for respiratory distress or dyspnea

1. Since when? And were there previous similar attacks?
2. Analyze the problem:
    - Onset (sudden may suggest foreign body or allergy, while gradual go with infections)
    - persistent or intermittent _if intermittent ask about frequency and duration of episodes_
    - Severity (his ability to continue his activities)
    - Aggravating and relieving factors (in upper airway obstruction like epiglottitis the child may assume sniffing position to relive himself)
    - Associated cardio-respiratory symptoms (cough, sputum, hemoptysis, wheezes, cyanosis, chest pain, palpitations, loss of consciousness, limb swelling, and malaise) and in infant add (poor feeding, sleeping, irritability, and failure to thrive)
3. Infections, ask about fever plus:
    - Upper airway infections (nasal discharge, congestion, strider, hoarseness, and contact with URTI cases)
    - Lower tract infections (contact with chest infections or similar cases, recent URTI for bronchiolitis)
    - vaccination
4. Lung diseases
    - Asthma (past or family history of allergy and asthma, pets, smoking in home, and ventilation), this most important in those with recurrent chest infections
    - GERD (regurgitation and heartburn), this most important in those with recurrent chest infections
    - Cystic fibrosis (chronic diarrhea, steatorrhea, failure to thrive, and family history), this most important in those with recurrent chest infections
5. CNS and musculoskeletal causes (headache, vomiting, photophobia, muscle weakness or paralysis, diplopia, ataxia, hearing defects, and muscles pain)
6. Chest, head, and back trauma.
7. Past medical history should include
    - heart diseases
    - anemia, if they measured hemoglobin, and if he is known to have sickle cell anemia as it causes acute chest syndrome
    - diabetes and renal disease (these cause acidosis that cause respiratory distress)
8. Drug intoxication.
9. Perinatal history including drug intake during pregnancy, prematurity and ICU admissions (RDS and bronchopulmonary dysplasia is important causes of respiratory distress in infants and newborns, in addition congenital heart disease may be caused by teratogenic drugs)

16. History for skin rash

1. Since when? And is this the first time to have such problem?
2. describe the rash:
    - Distribution and progression (where started, and to where extended, time between changes in location, and if ever disappeared completely?)
    - What is its color? Is it water filled _vesicles_? Or is there any discharge or bleeding? Is it painful or itchy?
3. Were there fever, malaise, and lethargy? (The presence of fever add to the diagnosis many differentials:)
    - Meningitis (headache, nausea, vomiting, and photophobia, or nonspecific symptoms in small infants like poor feeding, irritability, sleeping patterns)
    - Scarlet fever (sore throat and strawberry red tongue)
    - Some pneumonias like mycoplasma (dyspnea, chest pain, cough, and sputum)
    - Measles (cough, coryza, and conjunctivitis _red eyes_ started few days before the rash, and white spots on the buccal mucosa)
    - Rubella (swellings on the neck or behind the ears due to lymphadenopathy)
    - Erythema infectiosum _fifth disease by parvovirus_ (before the rash appeared on the body was there slapped cheek appearance)
    - Varicella zoster (localized and constant pain at the site of the rash that started before the rash)
    - Hepatitis A or B, enteroviruses, and malaria (jaundice, dark urine, and diarrhea)
    - *Vaccination history*
    - *History of contact with similar case*
    - SLE (malar rash, painless oral ulcers, photosensitivity _skin reaction to light_)
    - Systemic Juvenile idiopathic arthritis and Rheumatic fever (joints pain and swelling, chest pain, and history of sore throat within the last 30 days)
    - Kawasaki disease (red eyes, red tongue and cracked lips, red and swollen palm)
4. Skin diseases (past and family history of allergies, asthma, and skin diseases, and if there are pets. And for contact dermatitis ask about new clothes or diapers.)
5. Dermatomyositis (does he have muscles pain?)
6. Bleeding disorders (easy bleeding, epistaxis, past and family history of bleeding disorders)
7. HSP (hematuria and abdominal pain), this in addition to the already asked about arthritis.
8. Drugs allergy or side effects (has he taken any drugs? Or applied any cream or ointment on his skin)
9. Has he taken any special food today?
10. If he is neonate, ask about maternal infections during birth. And about nonspecific symptoms as it may be neonatal sepsis.

17. History for cyanosis

*arrange the differential diagnosis when taking the history according to the associated cardio-respiratory symptom.

1. Since when? And were there previous similar attacks?
2. Analyze the problem:
    - site of the bluish discoloration (central _tongue & lips_, or peripheral _hands & feet)
    - Onset and persistency, if intermittent then ask about duration and frequency of episodes.
    - Aggravating and relieving factors (cold, feeding _may indicate tracheoesophegeal fistua_, squatting _may indicate cyanotic heart_)
    - Associated cardio-respiratory symptoms (difficulty breathing or noisy breathing, cough, sputum, hemoptysis, wheezes, chest pain, palpitations, loss of consciousness, limb edema, and malaise) and in infant add (poor feeding, sleeping pattern, activity, and failure to thrive)
3. Foreign body aspiration (history of choking, and ask if he plays with small objects)
4. Ask about chest trauma that may have affected the heart or lung, or head trauma that may've affected the CNS.
5. ask about fever to rule out pneumonia and septic shock
6. Lung diseases:
    - asthma, and if there was fever, then may be asthma exacerbation (past and family history of asthma, pets, ventilation, and treatments tried)
    - cystic fibrosis (chronic diarrhea, steatorrhea, not gaining weight, and family history)
7. Congenital heart diseases
    - past history of CHD
    - Prenatal history of drug intake, infections, and fever. In addition, ask about mode of delivery.
    - postnatal history of ICU admission
8. polycythemia and methemoglobinemia (headache and ask about hemoglobin measurements)
9. CNS causes (headache, vomiting, photophobia, visual and hearing defects, seizures _abnormal movements_)
10. Drugs history
11. In neonate, ask about asphyxia and prematurity (prematurity is a cause of periventricular hemorrhage which causes apnea)

18. History for failure to thrive

*FTT is defined by both poor weight gain and low weight below the 5th or 3rd percentile on a growth chart. Although it includes length, but weight is affected first.

*the case present to you complaining from poor weight gain or low length, or sometimes detected at hospital on growth assessment. Disease of any system can cause FTT, so we have to search between almost everything. In neonates and small infants you better start with perinatal history, in older infants and children you can delay it.

1. Since when the problem noticed?
2. What is his current weight and height? How much they were 6 months ago? How much they were at birth?
3. Perinatal history is very important in regards for congenital or anatomic causes of FTT:
    - Prenatal history: Maternal infections, illnesses, and substances intake during pregnancy (all of which can cause congenital heart diseases and congenital infections). Also ask of there were identified fetal problems during pregnancy like intrauterine growth retardation.
    - birth history: Mode of delivery, asphyxia, prematurity and birth sizes (weight, length and head circumference).
    - Post natal history: early or prolonged jaundice? (May indicate hypothyroidism, congenital infections, and inadequate breast feeding), any diagnosed congenital illnesses including hypothyroidism? Did he need ICU admission, oxygen or ventilatory support?
4. Feeding or diet history
    - In infant:
        - Breastfed or formula? If formula what is the formula? If he was breastfed, when he stopped.
        - How many meals per day he is fed? And how much quantity of each meal (in breastfed, ask how long he spent sucking)
        - Any issues like poor sucking or refusal to eat.
        - If he is introduced to food, when and what food, and was there a complications (vomiting) or allergy to any specific food? And ask if he drinks too much juice
    - In child:
        - How many meals and what is their times and lcoations? What foods he usually eats at meals? How much is the quantity of each meal?
        - Does he feed himself? If so does anybody observe him while eating?
        - Any issue like refusal to eat or complications or allergies after certain food? Does he drink too much juice?
5. Ask yourself: Does the child have malabsorption or other causative GIT problem?
    - Diarrhea, steatorrhea, blood in stools, vomiting, abdominal distention & pain, flatus, and jaundice.
    - Celiac disease (If these symptoms present, are they related to wheat and grains, and is there a family history of celiac?)
    - IBD (arthritis and mouth ulcers)
    - Lactose intolerance (are the above symptoms related to milk? Is there family history)
6. Ask yourself: does the child suffer from cardio or respiratory problem?
    - Cardio-respiratory symptoms (difficulty breathing, cough, sputum, hemoptysis, wheezes, cyanosis, chest pain _not in infant plz_, palpitations, loss of consciousness, limb edema, and malaise)

- Cystic fibrosis, in addition to the respiratory and malabsorption symptoms you ask about (past and family history of CF)
- Asthma (past and family history, pets, and ventilation)
- GERD (food regurgitation and heart burn)
- Anemia (past and family history, blood loss in stool or urine may cause anemia)

7. Ask yourself: does the child have endocrine problem?
    - Hypothyroidism (cold-intolerance, slowness, constipation, thyroid disease on newborn screening)
8. Ask yourself: does he have neuro-muscular problem? These can also affect growth via affect on other systems like respiratory.
    - Muscles weakness, muscle atrophy, muscles pain
9. Ask yourself: does he have renal problems?
    - Past history of renal failure and recurrent UTIs
    - Renal symptoms (oliguria, frequency, urgency and changes in color)
10. history of recurrent fever and ear infections (may indicate immunodeficiency)
11. Ask yourself: could this be a genetic problem? Take family history
    - Are his parents short?
    - Any of his siblings has the same problem?
12. Ask yourself for the last time: is his social environment acceptable? Take social history …
    - Parents' education and occupation (very important, when both parents are busy at their works)
    - Are the parents together or divorced?
    - Living conditions (income and region where they live)

19. History for pallor (or anemia)

*note: patient may present with low hemoglobin after lab evaluation for another reason

1. Since when detected? Is this the first time to happen to him?
2. Ask about the pallor
    - Sudden or gradual? Persistent or intermittent?
    - Aggravating or reliving factors (exercise and rest)
    - Associated cardio-respiratory symptoms (SOB, palpitations, loss of consciousness)
3. Have you measured hemoglobin levels?
4. Hemolytic anemia
    - Jaundice, dark urine, and abdominal pain in case of RBC sequestration in spleen in SCA
    - Past and family history of G6P deficiency & thalssemia & splenectomy, has he eaten fava beans? Has he taken any drugs?)
    - Sepsis (fever)
5. Blood loss associated anemia
    - Sign of dehydration (thirst, oliguria, and tears)
    - Hemorrhage and blood loss from the intestine or urine, or was there trauma and surgeries.
    - bleeding disorders and HSP (easy bleeding, joint pain, rash, and abdominal pain)
6. Nutrition associated anemia
    - Ask about his diet, does he eat enough meat, vegetables, and fruits? If infant ask about feeding history
    - Malabsorption (abdominal distention, weight loss, vomiting and diarrhea)

20. History for lymph nodes swelling (lymphadenopathy)

1. Since when? And is it the first time to happen?
2. Describe the swelling
   - Number and Locations. In addition ask if it began elsewhere, if so ask what sites were involved in sequence.
   - Description (What is its color? Was it painful? Was there a discharge?)
   - Progression (how size, pain, and color changed over time?)
   - Was there associated fever?
3. Group A Streptococcal pharyngitis and EBV especially if cervical lymph nodes (ask about sore throat and snoring). In EBV and CMV there is also splenomegaly, so ask about (abdominal discomfort, and swelling)
4. Measles also cervical LN (cough, coryza, and conjunctivitis, and a rash few days later, white spots on the buccal mucosa, contact with others with rash)
5. TB and lymphoma in the mediastinum (cough, difficulty breathing, chest pain, night sweats, weight loss, and anorexia), and specific for TB ask about (TB vaccine, contact with TB patients, elderly in the house)
6. Lymphoma involving other areas (abdominal pain, bone pain, altered mental state, and headache)
7. Rheumatic diseases including SLE (arthritis, photosensitivity, and painless mouth ulcers)
8. Brucella (History of unpasteurized milk ingestion or contact with animals?)
9. Cat-scratch disease (History of cat or dog scratch or bite also in cervical LN)
10. Anyone in the family had similar problem?
11. If infant, ask about maternal infection or fever during pregnancy (this may raise suspicion for congenital infections especially toxoplasmosis)

21. History for neonatal jaundice

- Age is very important to take in this case, because physiologic jaundice only from 3rd day of birth, earlier is pathologic. Breast fed jaundice occur in first week, while breast milk jaundice extend to the 2nd week.
- In the OSCE, you have to determine direct or indirect from the beginning then take the history accordingly. They may give you bilirubin measurements, so note the following, total bilirubin more than 6mg/dl required in pediatrics to appear clinically, in direct (conjugated) bilirubinemia, the direct bilirubin should be more than 20% of total or more than 2g/dl regardless of total.
- Eg. Total 10mg/dl, direct 4mg/dl, this is direct (conjugated) bilirubinemia and you take history accordingly
- Remember, direct jaundice is always pathological

History for direct (conjugated) jaundice

1. Duration, and if first attack.
2. Where first seen? Where distributed? Sudden or gradual onset?
3. Pale stools and dark urine? YES
4. Rule out sepsis and hepatitis:
    - Fever, irritability, poor feeding, and sleeping pattern
    - Quick systemic review mainly UTI (frequency, hematuria, vomiting, ear discharge, cough, SOB, diarrhea, joint swelling, and skin infections)
    - Maternal fever or infection during pregnancy or birth. Or history of blood transfusion.
    - Has he taken the TB vaccine yet? Any elderly living with him.
5. Hypothyroidism (macroglossia, weak cry, screening for thyroid? Does the mother take anti-thyroid drugs?
6. Biliary atresia, after 2-3 weeks age, symptoms resulting from hepatomegaly and liver failure (abdominal distention, easy bleeding, blood in stools, and limbs edema)
7. Cystic fibrosis, especially if there were respiratory symptoms when you asked about sepsis (steatorrhea, when you kiss the child salty skin, family history of CF, family history of similar case of jaundice)
8. Feeding history
    - Breast or bottle feed? When started?
    - How many meals per day? How much amount per meal or how long he remains sucking?
    - Any sucking difficulties or refusal?
    - Did he vomit after particular milk or had any reaction?
9. Galactosemia (giving him cow milk or breast fed for the first time, and vomiting)
10. Past medical and drug history
11. Perinatal history (asphyxia, prematurity and low birth weight) note: asphyxia can cause vascular problems regarding fetal circulation causing liver diseases

History for indirect jaundice

1. Duration, and if first attack.
2. Where first seen? Where distributed? Sudden or gradual onset?
3. Pale stools and dark urine? NO, but may be dark urine …
4. Also rule out sepsis and hypothyroidism as the history above
5. Mother and infant blood groups, and previous pregnancies.

6. Breastfeeding and breast milk jaundice (is he on it? Since when? How many times per day? Sucking time? refusal)
7. G6P def (family history)
8. Pyloric stenosis in very newborn (passage of meconium, projectile vomiting, and abdominal distention after anything he eat.
9. Perinatal history must include (maternal diabetes, gestational age, birth weight, and any birth trauma)
10. Indirect bilirubinemia complications mainly kernicterus (decreased activity, abnormal movements, high-pitched cry, and loss of consciousness)
11. Family history of blood disorders, liver disorders,

***Notes about blood groups incompatibility:*

RH incompatibility

Mother RH(-), child RH(+), during rupture, the child antigen stimulated maternal IgM antibodies that don't cross placenta, however maternal IgG produced later will stay to the next pregnancy and affect the second pregnancy.

ABO incompatibility

Mother O or A or B, child A or B or AB. This is milder than Rh inc., and occurs in first pregnancy.

22. History for jaundice in children

1. Duration, and if first attack.
2. Where first seen? Where distributed? Sudden or gradual onset?
3. Pale stools, dark urine, and ithcing?
4. Hepatitis (fever, anorexia, nausea , vomiting, and rash)
5. Other GIT symptoms of hepatobiliary disease (Diarrhea or constipation, blood in stools, abdominal pain and its relation to food, abdominal distention, and past history of liver disease or surgeries)
6. Symptoms of liver dysfunction (limbs swelling, and bleeding tendency)
7. Hemolytic disorders (pale, fatigue, exercise intolerance, family history of G6P deficiency or any other blood disorder, has he ingested fava beans?)
8. History of blood transfusions (may indicate hepatitis or hemolytic diseases)
9. Cystic fibrosis (steatorrhea, cough, chest infections, family history of CF)
10. Hypothyroidism (cold intolerance, slowness, weight gain, past history of thyroid disease)
11. Drug history
12. Travel history
13. If long duration ask about kerniectrus (abnormal movements and loss of consciousness)

23. History for constipation

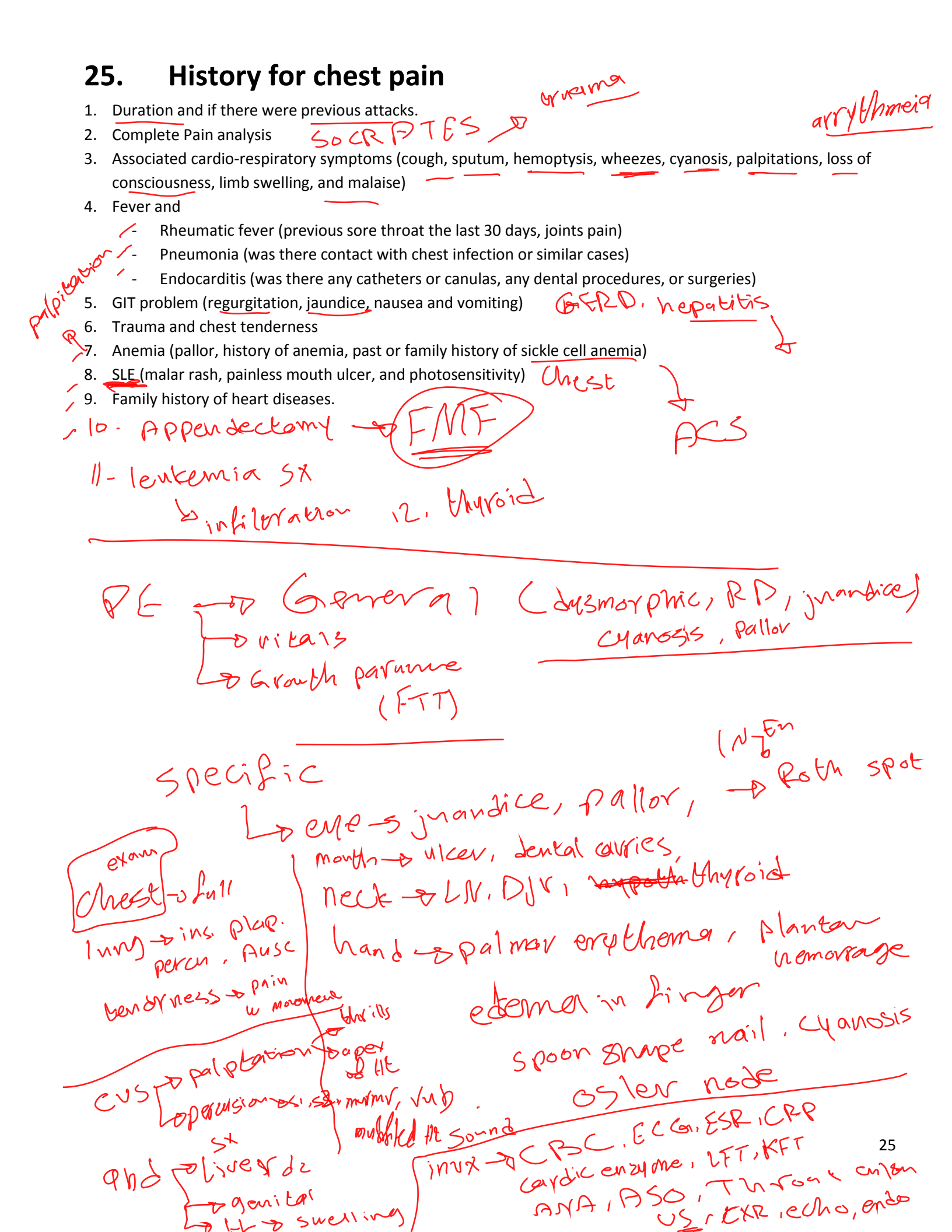
1. Since when? Was there previous similar attacks?
2. Analyze the constipation
    - How many times he passes stool per day? How long stay straining in bathroom?
    - Stool characteristics (consistency, color, contents _ blood, mucous, or fatty_, in addition to amount and shape)
    - Associated abdominal pain, anal pain, and rectal bleeding.
3. Intestinal obstruction (abdominal distention, vomiting and if vomiting relieves the symptom, and abdominal surgeries)
4. Hirchsprung disease (delayed passage of meconium more than 2 days)
5. Low fiber diet (ask if he eats fruits and vegetables and what is his usual foods)
6. Neurogenic abnormalities (urinary incontinence, lesion or hair tuft on his back, and head or back trauma)
7. Hypothyroidism (cold intolerance, slowness, weight gain, past history of thyroid disease)
8. Celiac disease (ask about diarrhea after glutin diet, and family history)
9. Dehydration (he drink enough water, thirsty, oliguria, and change in consciousness state)
10. Botulism (any limb paralysis, wound history, fever, any honey consumption in < 1 year infant only)
11. Is he diabetic?
12. Drug history especially iron intake.

24. History for oliguria or anuria (acute renal failure)

1. Since when? Were there previous episodes?
2. Sudden or gradual onset of problem
3. Prerenal causes:
    - Is he dehydrated? (thirst, dry mouth, absent tears, and change in consciousness)
    - Does he have diarrhea or vomiting?
    - Does he have any blood loss from skin, GI, or urine?
    - Decreased cardiac output (SOB, orthopnea, chest pain, palpitations, cyanosis, leg swelling, and past history of cardiac disease and hypertension)
    - Is he septic? (fever)
4. Renal causes
    - Hematuria?
    - Poststerp GN (history of sore throat within the past 30 days)
    - HSP (rash, joints pain, abdominal pain)
    - HUS (history of bloody diarrhea or chest infection during the past 10 days, and bleeding tendecny)
    - Hemolytic anemias (pale, jaundice, and past history of anemia especially sickle cell disease)
    - Drug intake …
5. Post renal or obstructive problems
    - Stones (Flank or suprapubic pain and dysuria)
    - Trauma
    - Neurogenic bladder (diabetes, back lesion or hair tuft, or past history of back surgeries)
    - Ask if he had recurrent UTIs
    - Past and family history of renal diseases
6. Perinatal history (drugs intake, and prematurity)

25. History for chest pain

1. Duration and if there were previous attacks.
2. Complete Pain analysis
3. Associated cardio-respiratory symptoms (cough, sputum, hemoptysis, wheezes, cyanosis, palpitations, loss of consciousness, limb swelling, and malaise)
4. Fever and
   - Rheumatic fever (previous sore throat the last 30 days, joints pain)
   - Pneumonia (was there contact with chest infection or similar cases)
   - Endocarditis (was there any catheters or canulas, any dental procedures, or surgeries)
5. GIT problem (regurgitation, jaundice, nausea and vomiting)
6. Trauma and chest tenderness
7. Anemia (pallor, history of anemia, past or family history of sickle cell anemia)
8. SLE (malar rash, painless mouth ulcer, and photosensitivity)
9. Family history of heart diseases.



26. History for limbs swelling (leg edema)

1. Since when, and were there previous episodes
2. Ask about the swelling
   - Site, Where started and to where extended?
   - Onset sudden or gradual? Persistent or intermittent? How severity changed?
   - Is it painful? It is red? (cellulitis or trauma)
   - Aggravating or relieving factors (position, rest, movements)
3. Trauma to the legs.
4. Fever? (could be cellulites if painful swelling)
5. Congestive heart failure (SOB, orthopnea, cough, chest pain, cyanosis, palpitations, loss of consciousness, past and family history of heart disease and hypertension)
6. Liver failure (jaundice, abdominal distention, vomiting, blood in vomiting or stools, diarrhea, bleeding tendency, past history of liver disease)
7. Renal failure or nephrotic syndrome
   - polyuria or oliguria, frequency, change in urine color, abdominal pain, swelling around the eyes and in the hands, past and family history of renal disease, history of stones

   * Only if there was hamaturia then take full history for red urine
8. Does he eat well?
9. Hypothyroidism (cold intolerance, slowness, weight gain, past history of thyroid disease)
10. Allergy (insect bite, drugs, past and family history of allergy)
11. Arthritis (pain, swelling and past history) note that if appeared to be arthritis then take full history for arthritis …
12. Has he been given IV fluids recently?
13. If there were associated face swelling then ask about:
    - Cushing synrdome (weight gain, growth failure, hirsutism, and steroids intake)
    - Sinusitis (facial pain and headache)

27. History for abdominal distention

1. Since when, and were there previous episodes
2. Ask about the distention
    - Where started and to where extended? And is there other sites like legs involved
    - Onset sudden or gradual? Persistent or intermittent? How severity changed?
    - Is it painful?
    - Aggravating or relieving factors (position, rest, movements)
3. Intestinal obstruction (vomiting, constipation, pain, previous abd. Surgeries, and passage of meconium)
4. Malabsorption
    - Diarrhea, steatorrhea, flatus, and growth failure
    - IBD (arthritis and mouth ulcers)
    - Cystic fibrosis (family history, chronic cough, breathlessness, and recurrent chest infections)
    - Celiac disease (If these symptoms present, are they related to wheat and grains, and is there a family history of celiac?)
    - Lactose intolerance (are the above symptoms related to milk? Is there family history)
5. Liver failure (jaundice, blood in vomiting or stools, bleeding tendency, past history of liver disease)
6. Congestive heart failure (SOB, orthopnea, cough, chest pain, cyanosis, palpitations, loss of consciousness, past and family history of heart disease and hypertension)
7. Renal failure or nephrotic syndrome
    - polyuria or oliguria, frequency, change in urine color, abdominal pain, *swelling around the eyes* and in the hands, past and family history of renal disease, history of stones

    *Only if there was hamaturia then take full history for red urine

8. ask about malnutrition
9. peritonitis or pericarditis (ask if there were fever)

28. history for stridor

1. Since when? And was there previous episodes?
2. Analyze the stridor
    - How it sounds?
    - Sudden or gradual onset? Intermittent or persistent?
    - Specific time for aggravation
    - Aggravating factors (activity, moving) and relieving factors (cold air, taking a certain posture)
    - Was there associated cyanosis or loss of consciousness?
3. Croup (fever, barking cough, and hoarseness)
4. Epiglottitis (dysphagia, drooling, taking tripod position to relieve symptom, and vaccination)
5. Foreign body aspiration (choking, playing with small objects)
6. Allergy (swelling around the eyes and mouth and elsewhere, past and family history of allergy)
7. Recent drug intake