



Pediatric OSCEs

020 OSCEs - 011 OSCEs

**Collected by:
Shahed Atiyat**

020 OSCEs



1st rotation

- 1. History taking: Fever and headache.**
- 2. Physical examination: Chest inspection and palpation.**
- 3. Data interpretation: Bacterial meningitis.**

019 OSCEs



1st rotation

1. History taking: 2 Year old pale patient, give 2 ddx (Leukemia (AML), thalassemia)

2. Developmental assessment, give the age of child.

The baby walk and crawling up stairs, hug parents and point to things, draws vertical line, 3cubes, says baba mama non specific —Answer: 15 months

There was a speech delay -- Give a cause: Hearing problem.

2nd rotation

1. History taking: The mother of 9 month girl baby brings her child to ER complaining of abnormal breathing sounds.

2. Data interpretation: CSF analysis.

3rd rotation

1. History taking: 1 year child with diarrhea.

2. Developmental data interpretation:

- Gross motor 10 months sitting without support ,pulls to stand.
- Social language fine motor all with 15 month of age.

What do you call it? Isolated gross motor developmental delay.

ddx? Cerebral palsy.

4th rotation

1. History taking: 2 Year old child complaining of abnormal movements & 2ddx.
2. Growth chart for a 6.5 years old boy 32kg and 133 cm.
Overweight on BMI chart

5th rotation

1. History taking: Child with fever and dysuria.
Diagnosis: Pyelonephritis.
How to take the sample: Midstream.
2. Data interpretation: CBC (Low Hb low MCV -> microcytic anemia)
 - The diagnosis is: Thalassemia cause normal RDW
 - What other investigation needs to confirm? High RBC
 - How to diagnose beta thalassemia? Electrophoresis

6th rotation

1. History taking: 18 months with fever and cough.
2. Data interpretation: UTI.

7th rotation

1. History taking: 18 months boy with vomiting and diarrhea.
2. Data interpretation: CSF analysis.

8th rotation

1. History taking: 12 year old female with 9 months duration of headache.
 - What are the most important points to focus on in your exam: Fundoscopy + Elevated BP.
 - What is the most likely diagnosis (given that there's a normal physical exam):
Primary Headache (Migraine)
2. Data interpretation: CXR for a 3 year old who presented with cough and respiratory distress symptoms (Read the x-ray comment on patient ID/ name/ age and PA image. Comment on exposure/ penetration, trachea position lung fields).
 - What are your findings? lobar consolidation with pleural effusion, atelectasis
 - What are the findings that you expect to see in percussion and auscultatio?
 - What is your diagnosis? Complicated Pneumonia.
 - What is the most common causative organism? Strep pneumonia
 - What investigation to do? CBC/ ESR /CRP / Blood culture.
 - What is your treatment (Just mention your choice of ABx)? ceftriaxone (any 3rd generation cephalosporins) + Vancomycin

9th rotation

1. History taking: Yellowish discoloration.

2. Developmental data interpretation for 18 months baby.

Gross: cruises (delay)

Fine: scribbles (normal)

Speech: ba, ma (delay)

Social: bye bye (normal)

- **What do you call it? Global developmental delay**
- **Hx? Past medical conditions, Previous siblings with same complaint, Previous developmental pattern**
- **Physical? General look for dysmorphic features, Vitals, Height, weight, head circumference, Hearing, Neurological exam**

018 OSCEs



1st rotation

1. History taking: 2.5 year-old boy with cough and fever (Three days duration, wet cough, fever measured at around 38) & 2 ddx.

2. Plot on a growth chart for a 9-month-old female, 6 kg, 70 cm

Findings were failure to thrive (under 5th percentile) and normal height (50th percentile I think)

3. History taking: 1 year old girl having acute diarrhea and vomiting & 2 ddx.

Answer: Acute gastroenteritis, food poisoning or UTI

4. Growth plot chart, the case was for an 18 months old boy, the weight was normal at 25th percentile and he has short stature (below the 5th percentile), What do you think the cause?

I think the Right answer is endocrine cause (hypothyroidism: short stature with normal to high weight)

2nd rotation

1. History taking: 5 year old girl with history of abdominal pain and fever.

Dignosis: UTI

2. Developmental assessment for 2 year old child

3. History taking: 1year old girl with abnormal breathing sounds (wheeze) & ddx
ddx: Asthma, bronchiolitis

4. Developmental assessment for 10 months child & Name 2 test to assess the tone.

1. Head lag

2. Ventral suspension

3. Vertical suspension

3rd rotation

1. History taking: 2 year old boy with abnormal movements & 2 ddx.
ddx: Febrile seizure and meningitis.

2. Data interpretation: CBC with 9 Hb

- What's your interpretation? Low Hb
- What else would you like to know from this CBC? MCV, RDW, retic count
- If MCV was 55, what's your interpretation? Low MCV
- What's your differential diagnosis, if the RDW was 13.5? Beta thalassemia minor
- How to diagnose beta thalassemia? Hemoglobin electrophoresis will show elevated levels of HbA2.

3. History taking: Yellowish discoloration.

4. Data interpretation: CSF analysis.

4th rotation

1. History taking: 5 days newborn with yellowish discoloration of her eyes and skin.

2. Data interpretation: An 8 year old male female has weight of 26 Kg, length of 112 cm. Plot those parameters on the growth chart.

5th rotation

1. History taking: 5 days newborn with yellowish discoloration of her eyes and skin. How to distinguish between physiological and pathological jaundice in case of onset?

2. Patient (weighs 10kg) came to clinic with vomiting and diarrhea for few days came with signs of sunken eyes and tachycardia, blood pressure was normal (moderate dehydration).

Her labs were: Na 140 \ K 3.5 \ Urea 34 \ Creatinine 0.6

- Comment if these are normal values or not? Normal.
- If this patient came to ER, what is the immediate next step? 20ml/kg normal saline bolus.
- Calculate his maintenance for 24 hours and deficit? When to give it?
Maintenance= $10 \times 100 = 1000$, Deficit= $10 \times 10 \times 7\% = 700$, divide half over first 8 hours and the remaining over 16 hours.
- If you were to give potassium, What should you check before giving it? If there is urine output or not.

6th rotation

1. History taking: 4.5 year old child with fever.

2. Lab tests of fever of unknown origin

CBC, blood culture, urine analysis, urine culture, LP

3. If the patient is complaining of dysuria and urine analysis was done showing the results below:

WBC: 20-30 cell HPF, CBC:10-12, RBC: 10-12, Bacteria: seen.

- Interpret the results? Elevated WBC & RBC
- What is your most likely diagnosis? UTI
- What test do you do to confirm? The gold standard test to diagnose UTI is Urine culture.

- In urine dipstick test, what tests confirm the presence of bacteria? Leukocyte esterase positive & nitrite positive.
- Now you want to take a urine sample from the patient, how would you take it? Midstream, catheter
- The patient's diagnosis came back to be pyelonephritis and you are afraid of sepsis, what labs would you order to confirm? CBC, blood culture.

7th rotation

1. History taking: 9 year old child with short stature.
2. Data interpretation: CSF analysis (bacterial meningitis).

8th rotation

1. History taking: 3 months baby with tachypnea.
 - Dx: Heart failure.
 - Mention 2 possible causes
2. Data interpretation: Growth chart for a 6.5 year old boy 32kg and 133 cm
Overweight on BMI chart.

9th rotation

1. History taking: 8 year old girl with abnormal movements.
2. Data interpretation: Urine analysis.

10th rotation

1. History taking: 2 year old child with fever and cough.

2.

- What are the 4 main domains of developmental milestones?

Gross motor, fine motor, social and speech.

- Perform a developmental assessment for a child who sits alone without support, and he scribbles, makes a tower of 2-3 cubes, holds a spoon and he knows about 6 words.

- You should say the developmental age for each domain and then decide whether he has a delay or not, knowing that the chronological age is 1.5-year-old, so he has a gross motor delay.

- Give 1 differential diagnosis? Cerebral palsy

018 OSCEs

6th year



1st rotation

- 1. History taking: Neonatal fever (sepsis)**
- 2. Physical examination: Signs of dehydration & cardiac palpitation and auscultation**

2nd rotation

- 1. History taking: yellowish discoloration of eyes and skin**
- 2. Physical examination: Chest exam & abdominal palpation.**

3rd rotation

- 1. History taking: Short stature**
- 2. Physical examination: Lower limbs neurological examination (inspection / tone / power / reflexes / special signs)**
- 3. Physical examination: Focused examination for heart failure (general signs / vitals / chest exam / liver span)**

4th rotation

- 1. History taking: 6 year old girl with red urine of 3 days duration & dx & imaging of choice**
- 2. Physical examination: Signs of dehydration in a child with gastroenteritis.**
- 3. Physical examination: Signs of asthma exacerbation**

5th rotation

1. History taking: 2 years old with pallor.

- The child has anemia with hepatosplenomegaly. what is your DDX: Leukemia, Thalassemia, Infection?
- What diagnostic studies would you order? CBC, blood smear, Hemoglobin electrophoresis, Hemolysis labs, BM biopsy

2. Physical examination: Focused examination for heart failure

Heart failure exam:

Vital signs: pulse (rate, rhythm, volume), RR, BP

Tachypnea, sweating

Palpation of apex beat (looking for character and displacement) and heaves and liver.

Auscultation looking for murmurs, S3, and gallop rhythm and auscultating lung base

LL edema, abdominal fullness

3. Physical examination: Examination for meningitis

015 OSCEs



1st rotation

1. History taking: Yellowish discoloration of eyes and skin.

- What do you think the cases? Physiologic jaundice
- What are the tests you would order? CBC, total and fractionated bilirubin.

2. 2 year old female with fever, headache and vomiting. CSF analysis values showed (WBC and neutrophils, protein, sugar)

- What is the Dx? Bacterial meningitis
- What other tests would you order for the CSF? Culture, latex, pressure, visualize turbidity..
- The culture showed g-ve organism, what is the probable etiology?
- How would you manage?
- How would you manage family?

3. Perform developmental examination on this child and answer examiner's questions

- What is the fine motor age?
- Gross motor age?
- other parameters?
- If the child is 3 yo, is this normal?
- Mention some causes of GDD

4. A 1 year old male with blue discoloration, take hx from mother then answer the following.

- What simple tests would you do? Pulse oximetry and CXR (oligemic lungs).

2nd rotation

- 1. History taking: Child with yellowish discoloration of eyes and skin for 5 days duration.**
 - What do you think the cases? Physiologic jaundice
 - What are the tests you would order? CBC, total and fractionated bilirubin.
- 2. A 1 year old male with blue discoloration, take hx from mother then answer the following.**
 - What is the system involved?
 - Investigations?
- 3. Data interpretation: CSF analysis (Bacterial meningitis)**
- 4. Developmental assessment for 15 months-18 months baby.**

3rd rotation

- 1. Physical examination: Examine the abdomen >> splenomegaly.**
 - Give 3 causes of splenomegaly.
 - How to differentiate spleen from the left kidney?
- 2. Cerebellar examination.**
- 3. History taking: Child with abnormal breathing & dx & management.**
- 4. Data interpretation**
 - A. CBC**
 - What is the diagnosis? IDA
 - Give other diagnosis. Thalassemia
 - How to differentiate between IDA & thalassemia? By RDW

B. Determine weight and height percentiles of a girl by using a growth chart.

- **What is your diagnosis? Short Stature?**
- **Calculate the mid parental height.**

4th rotation

- 1. History taking: 10 year old girl with abdominal pain.**
- 2. History taking: 7 year old girl with fever and headache.**
- 3. Developmental assessment.**
- 4. Data interpretatio: Interpet this ECG for a child with syncope.**

014 OSCEs



1st rotation

- 1. Hx of 3 year old boy with fever and seizures.
Case of meningitis.**
- 2. Cardiovascular physical exam + questions about RF.**
- 3. Hx of 6 months boy cough, fever and recurrent infections.
Case of CF.**

2nd rotation

- 1. 6 year old child with asthma, do respiratory examination, what is the treatment?**
- 2. Hx of 3 month old infant with SOB for 1 month duration.
Dx: heart failure. Name 3 common causes of heart failure at this age.**
- 3. Hx of 5 year old child with morning eye puffiness for 5 days.
Dx: Nephrotic syndrome. What are the most 3 important investigations you should ask for?**

3rd rotation

- 1. Full GI examination. What are the possible causes of bloody diarrhea of a 6 year old child?**
- 2. Full respiratory examination. How to manage a case of acute Asthma?**
- 3. Hx of headache for a child. What's the ddx?**

4th rotation

1. The mother of an 11 year old child presented to you complaining that her son's eyes have been yellow for two days. Take an appropriate history and answer the examiner's question.

- **Diagnosis: Acute viral hepatitis.**
- **If after ordering liver enzymes you find that ALT and AST are elevated. Name 5 investigations you would order to confirm your diagnosis.**

2. The mother of a 5 year old child presents to you complaining that her son has had red colored urine for the past number of days. Take an appropriate history and answer the examiner's questions.

- **Diagnosis: Post-streptococcal glomerulonephritis.**
- **Name the investigations you would order to confirm your dx.**

3. This patient presented with lower limb weakness. Please perform a focused neurological exam and answer the examiner's questions.

- **If lab tests show a greatly elevated CPK. Name the top two differential diagnosis for this patient's condition.**

5th rotation

1. Developmental examination of a child, mention 2 ddx of global developmental delay.

2. You are in the ER, a 3 year old child came complaining of rash. Take hx and answer examiners questions.

Dx: HSP. What investigations you need to order

3- A 6 month old baby complains of cough and fever. Take hx and answer examiners questions

Dx: Bronchiolitis. After examination he was found to have RR 60, sat 88%, How are you going to manage him?

013 OSCEs



1st rotation

1. Take a full Hx from a mother of 5 days neonate with yellowish discoloration of skin and eye. What's is the most likely diagnosis?

It was physiological Jaundice "breast milk jaundice".

2. Take a full Hx from the father of 6 year child with abdominal pain and fever of 2 days duration. What is the imaging used in the investigation?

It was UTI.

3. Do a full cardiology exam for 8 year child with palpation and what are the findings?

2nd rotation

1. Hx of hematuria with diagnosis and labs you would like to order.

2. Chronic cough with failure to thrive Hx with DDx

3. Full GI physical examination

3rd rotation

1. Hx of Seizures and Fever. What is the ddx?

2. Respiratory PEx including posterior and anterior chest.

3. Hx of Short stature. What's the investigations?

4th rotation

1. Developmental for a 3 year old child.
2. Hx of rapid breathing. What's the ddx?
The diagnosis was HF.
3. Hx of Headache and fever.

5th rotation

1. Hx of hematuria. What's the diagnosis and labs you would like to order?
2. Hx of chronic cough with failure to thrive with ddx.
3. Full GI physical examination.

6th rotation

1. PEx of respiratory system (anterior & posterior).
2. Hx of febrile seizure.
3. Hx of short stature.

7th rotation

1. DKA (6 years old child with polyuria, remember you should by history exclude UTI and what is your diagnosis and investigations).
2. Bronchiolitis (1 year baby with Cough, abnormal breathing sound, remember to rule out asthma by asking about allergy and atopic dermatitis).
3. Lower limb neurological exam
4. Acute rheumatic fever (6 years old with left knee swelling).
5. Croup (Cough, abnormal breathing sound).
6. Full GI exam.

8th rotation

1. Hx of jaundice in newborn 1 week old
Diagnosis: Physiological jaundice.
2. PEx of cardiovascular system
3. Hx of 6 year old girl with abdominal pain and fever. Mention 2 imaging studies you would like to perform.
 - Diagnosis: UTI.
 - Imaging: Ultrasound/ VCUG

9th rotation

1. Physiologic jaundice Hx.
2. Cardiac examination.
3. UTI Hx

10th rotation

1. Hx of skin rash (HSP).
2. Hx of diarrhea
3. Neuro exam
Don't forget clonus & Gowers' sign

11th rotation

1. Developmental assessment for a 3 year old.
2. Hx from mother complaining from cyanosis of her 3 month old baby during breast feeding + ddx
3. Hx for kid complaining from fever and sore throat + ddx

12th rotation

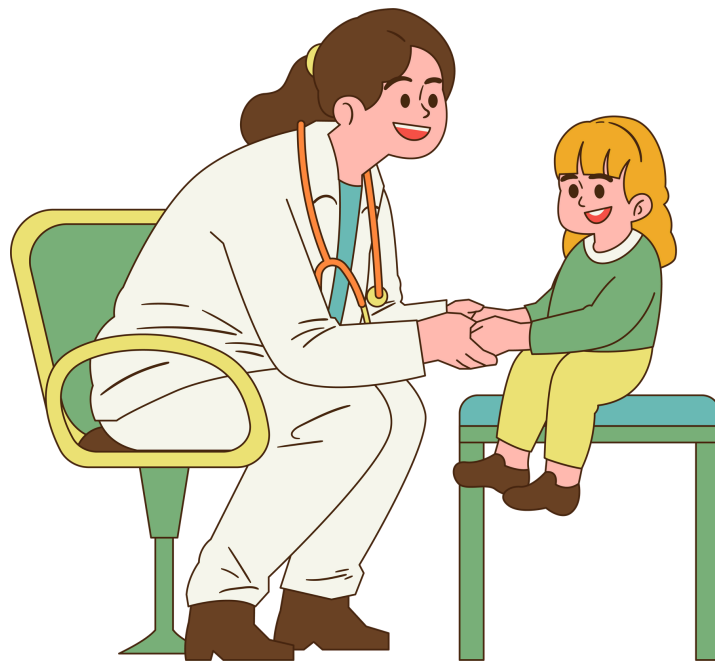
**1. Take a focused hx from a mother of 4 years old boy who had a seizure.
What are the required investigations?**

**2. Take a full hx from a father of 10 year old female with abdominal pain.
What is your final dx?**

Functional abdominal pain, IBS is not correct.

3. Full respiratory examination

012 OSCEs



1st rotation

- 1. CSF analysis (Herpetic encephalitis)**
- 2. Respiratory exam (the history was about a 4 year old female pt came after she swallowed a foreign body.. do a full respiratory exam and what are the findings.**
- 3. Hx of diarrhea (it was GE)**

2nd rotation

- 1. Developmental assessment**
- 2. History croup**
- 3. Patient presented with syncope ... do physical examination**

3th rotation

- 1. Hx (sinusitis)**
- 2. Measure head circumference then put it on the chart (microceph) then discussion about short stature**
- 3. Examine lower limb for hypotonia (neurological examination) then discussion about leukodystrophy.**

4th rotation

- 1. Fever history in 15 day old patient (Sepsis).**
- 2. Respiratory exam**
- 3) Developmental exam for a 1 year old patient**

5th rotation

- 1. History of infant with diarrhea of 1 week duration.**
- 2. Examination of the cardiovascular system of a child with Hx of myocarditis.**
- 3. Neurological exam of the lower limb of a child with proximal muscle weakness (just motor).**

011 OSCES



1st rotation

1. Hx of fever & vomiting
2. PEx: Cardiac exam for a patient with syncope + differential for syncope
3. Lab: Urine analysis with microscopic hematuria & RBC casts

2nd rotation

1. Hx of upper airway obstruction with differential (croup, epiglottitis, tracheitis, laryngomalacia, tracheomalacia...etc)
2. PEx: developmental assessment
3. Lab: CBC (anemia)

3th rotation

1. Hx: FTT
2. PEx: Respiratory (chest) exam
3. Lab: CSF

4th rotation

1. Hx of gastroenteritis
2. PEx: developmental assessment
3. Lab: Jaundice which will lead to a Dx of hepatitis

Other stations

1. Hx: Diarrhea and vomiting in 2 years old baby + question about signs of dehydration in PE
2. Hx: Jaundice in 2 days old neonate (physiological) + question about tests to order.
3. PEx: Respiratory examination + question on Mx of wheezy patient in ER with SPO2 95
4. Hx: cough of 15 minutes duration. Give DDx. Dx is F.B. Findings on X-ray.
5. Hx: 3 years old with high fever 38.5. Give DDx. Investigations. Dx is occult bacteremia
6. Abdominal exam
7. Hx: vomiting in 3 months old baby. Give DDx. Dx is pyloric stenosis.
8. PEx: examine cardiac function
9. Hx: knee swelling/pain: DDx, Dx is RF. Mention criteria
10. PEx: Respiratory, questions about cystic fibrosis
11. Developmental assessment: baby is premature, you have to correct the age

Good luck

