



# **COLLECTED OSCE EXAMS**

**Pediatrics**

**Collected by:  
Shahed Atiyat**

021 OSCEs



## 💡 **Rotation 1**

### **1. History taking: 6 year old child with abdominal pain**

- Investigations
- Diagnosis: pyelonephritis

### **2. Physical examination: Chest inspection and palpation.**

## 💡 **Rotation 2**

### **1. History taking: 2 days baby with jaundice**

- Diagnosis: ABO incompatibility

### **2. Physical examination: lower limb neuro examination**

## 💡 **Rotation 3**

### **1. History taking: joint pain and fever**

- Diagnosis: Septic arthritis

### **2. Physical examination: abdomen examination**

## 💡 **Rotation 4**

### **1. History taking: abnormal movements**

### **2. Physical examination: cardiac examination**

## 💡 **Rotation 5**

### **1. History taking: periorbital swelling**

### **2. Physical examination: chest inspection and palpation**

020 OSCEs



## 💡 **Rotation 1**

### **1. History taking: Fever and headache & CSF interpretation**

- Diagnosis: Bacterial meningitis.

### **2. Physical examination: Chest inspection and palpation.**

## 💡 **Rotation 2**

### **1. History taking: 5 year old boy presented with periorbital edema.**

- Investigations: KFT, urine analysis, serum albumin.
- Diagnosis: Nephrotic syndrome.

### **2. Physical examination: Full gastrointestinal system exam**

## 💡 **Rotation 3**

### **1. History taking: Fever and noisy breathing.**

- Diagnosis: Croup.

### **2. Physical examination: Motor examination of lower limb & reflexes.**

## 💡 **Rotation 4**

### **1. History taking: Neonatal jaundice.**

### **2. Physical examination: Cardiovascular system examination.**

## 💡 **Rotation 5**

### **1. History taking: 4 year old child with history of abnormal limb movement**

Name 2 differential diagnosis : Meningitis & Febrile seizure

### **2. Physical examination: Child presented with wheezes preform chest inspection and palpation for him.**

## ⌚ Rotation 6

### 1. History taking: Diarrhea and vomiting for 3 days duration

- Diagnosis: Gastroenteritis with dehydration
- Investigations: CBC, KFT, stool analysis

### 2. Physical examination: Lower limb neurological motor exam

## ⌚ Rotation 7

### 1. History taking: Fast breathing

- Diagnosis: Heart failure

### 2. Physical examination: Comprehensive abdominal examination

## ⌚ Rotation 8

### 1. History taking: Child is not growing well

### 2. Physical examination: Cardiovascular examination

## ⌚ Rotation 9

### 1. History taking: 12 years old girl with chronic headache for 6 months duration

- Diagnosis: Migraine

### 2. Physical examination: Chest inspection and palpation

## ⌚ Rotation 10

### 1. History taking: Child presented with cough & fever.

- Diagnosis: pneumonia
- Management: 3<sup>rd</sup> generation cephalosporin, IV fluids, O2 mask

### 2. Physical examination: lower limb neurological examination.

020 OSCEs



## 💡 **Rotation 1**

### **1. History taking: headache & fever**

- Mention 3 differential diagnosis

### **2. Physical examination 1: Child with asthma, examine him for acute asthma exacerbation and assess its severity**

### **3. Physical examination 2: signs of chronic liver disease**

## 💡 **Rotation 2**

### **1. History taking: Fever**

### **2. Physical examination 1: Meningitis**

### **3. Physical examination 2: Signs of heart failure**

## 💡 **Rotation 3**

### **1. History taking: 3 months old boy with rapid breathing**

- Mention 3 ddx

### **2. Physical examination 1: abdominal exam**

### **3. Question about short stature**

- Plot on growth chart
- Investigations
- Diagnosis

019 OSCEs



## 💡 **Rotation 1**

### **1. History taking: 2 Year old pale patient, give 2 ddx.**

- 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:

- Answer: Hearing problem.

## 💡 **Rotation 2**

### **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.**

## 💡 **Rotation 3**

### **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.

## 💡 **Rotation 4**

### **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

## • **Rotation 5**

### **1. History taking: Child with fever and dysuria.**

- Diagnosis: Pyelonephritis.
- How to take the sample: Mid-stream

### **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

## • **Rotation 6**

### **1. History taking: 18 months with fever and cough**

### **2. Data interpretation: UTI**

## • **Rotation 7**

### **1. History taking: 18 months boy with vomiting and diarrhea**

### **2. Data interpretation: CSF analysis**

## 💡 **Rotation 8**

### **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 auscultation?
- 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

## 💡 **Rotation 9**

### **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

019 OSCEs



## 💡 **Rotation 1**

### **1. History taking: Red urine**

- Diagnosis: Pyelonephritis
- What imaging test you do: US, MCUG, DEMSA

### **2. Physical examination: Child with cough, do full respiratory examination**

### **3. Focused exam for meningitis signs**

## 💡 **Rotation 2**

### **1. History taking: Skin rash**

- Diagnosis: HSP.
- Investigations: urine analysis, stool analysis for heme occult.

### **2. Physical examination: Neurological exam of lower limb**

### **3. Focused exam for pneumonia signs**

## 💡 **Rotation 3**

### **Growth chart plotting & interpretation**

- Short stature
- Diagnosis: constitutional short stature

### **2. Physical examination: Abdomen palpation**

### **3. History taking of chronic cough**

- Diagnosis: cystic fibrosis
- Investigations

## 💡 **Rotation 4**

### **1. History taking: Croup & PEx (signs of dehydration)**

### **2. Physical examination: Abdominal palpation**

018 OSCEs



## 💡 **Rotation 1**

**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)

## 💡 **Rotation 2**

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

Diagnosis: UTI

**2. Developmental assessment for 2 year old child**

**3. History taking: 1 year 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

### ! Rotation 3

#### **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**

### ! Rotation 4

#### **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**

## 💡 **Rotation 5**

**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.

## 💡 **Rotation 6**

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

**2. 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.

## 💡 **Rotation 7**

**1. History taking: 9 year old child with short stature.**

**2. Data interpretation: CSF analysis (bacterial meningitis).**

## 💡 **Rotation 8**

**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.

## 💡 **Rotation 9**

**1. History taking: 8 year old girl with abnormal movements.**

**2. Data interpretation: Urine analysis.**

## 💡 **Rotation 10**

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

## **2. Developmental assessment**

- 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



## 💡 **Rotation 1**

**History taking: Neonatal fever (sepsis)**

**2. Physical examination: Signs of dehydration & cardiac palpitation and auscultation**

## 💡 **Rotation 2**

**1. History taking: yellowish discoloration of eyes and skin**

**2. Physical examination: Chest exam & abdominal palpation.**

## 💡 **Rotation 3**

**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)**

## 💡 **Rotation 4**

**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**

## Rotation 5

### 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



## 💡 **Rotation 1**

### **1. History taking: Yellowish discoloration of eyes ad skin.**

- What do you think the cases? Physiologic jaundice
- What is 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).

## 💡 **Rotation 2**

### **1. History taking: 10 year old girl with abdominal pain.**

### **2. History taking: 7 year old girl with fever and headache.**

### **3. Data interpretation: Interpret this ECG for a child with syncope.**

### 💡 **Rotation 3**

#### **1. History taking: Child with yellowish discoloration of eyes ad skin for 5 days duration.**

- What do you think the cases? Physiologic jaundice
- What is 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?

### 💡 **Rotation 4**

#### **1. Physical examination: Examine the abdomen >> splenomegaly.**

- Give 3 cause of splenomegaly.
- How to differentiate spleen from the left kidney?

#### **2. Physical examination: 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.

014 OSCEs



## 💡 **Rotation 1**

**1. History taking: 3 year old boy with fever and seizures.**

**2. Physical examination: cardiac exam**

**3. History Taking: 6 months boy with cough, fever and recurrent infections.**

- Case of CF.

## 💡 **Rotation 2**

**1. physical examination: 6 year old child with asthma, do respiratory examination and what is the treatment?**

**2. History taking: 3 month old infant with SOB for 1 month duration.**

- Dx: heart failure.
- Name 3 common causes of heart failure at this age.

**3. History taking: 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?

## 💡 **Rotation 3**

**1. Physical examination: Full GI examination**

- What are the possible causes of bloody diarrhea of a 6 year old child?

**2. Physical examination: Full respiratory examination.**

- How to manage a case of acute asthma?

**3. History taking: headache for a child.**

- What's the ddx?

## 💡 **Rotation 4**

**1. History taking: The mother of an 11 year old child presented to you complaining that her son's eyes have been yellow for two days.**

- 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. History taking: 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.**

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

**3. Physical examination: This patient presented with lower limb weakness.**

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

## 💡 **Rotation 5**

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

**2. History taking: 3 year old child came complaining of rash.**

- Dx: HSP.
- What investigations you need to order

**3. History taking: 6 month old baby complains of cough and fever.**

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

013 OSCEs



### 💡 **Rotation 1**

#### **1. History taking: 5 days neonate with yellowish discoloration of skin and eye.**

- What is the most likely diagnosis? It was physiological Jaundice "breast milk jaundice".

#### **2. History taking: 6 year child with abdominal pain and fever of 2 days duration.**

- What is the imaging used in the investigation? It was UTI.

#### **3. Physical examination: Full cardiology exam for 8 year child with palpation**

- What are the findings?

### 💡 **Rotation 2**

#### **1. History taking: hematuria**

- Dx
- Labs

#### **2. History taking: Chronic cough with failure to thrive**

- Dx

#### **3. Physical examination: Full GI physical examination**

### 💡 **Rotation 3**

#### **1. History taking: Seizures and Fever.**

- What is the ddx?

#### **2. Physical examination: anterior and posterior chest exam**

#### **3. History taking: Short stature.**

- What's the investigations?

## 💡 **Rotation 4**

**1. Developmental for a 3 year old child.**

**2. History taking: Rapid breathing.**

- What's the ddx? The diagnosis was HF.

**3. History taking: Headache and fever.**

## 💡 **Rotation 5**

**1. History taking: Hematuria.**

- What's the diagnosis and
- Labs you would like to order?

**2. History taking: Chronic cough with failure to thrive**

**3. Physical examination: Full GI physical examination.**

## 💡 **Rotation 6**

**1. Physical examination: respiratory system (anterior & posterior).**

**2. History taking: Febrile seizure.**

**3. History taking: Short stature.**

## 💡 **Rotation 7**

**1. History taking: Physiologic jaundice.**

**2. Physical examination: Cardiac examination.**

**3. History taking: UTI**

## 💡 **Rotation 8**

### **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.**

## 💡 **Rotation 9**

### **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

### **4. Hx of skin rash (HSP)**

### **5. Hx of diarrhea**

## 💡 **Rotation 10**

- 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**

## 💡 **Rotation 11**

- 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



💡 **Rotation 1**

**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

💡 **Rotation 2**

**1. Developmental assessment**

**2. History croup**

**3. Patient presented with syncope ... do physical examination**

💡 **Rotation 3**

**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.**

011 OSCEs



### 💡 **Rotation 1**

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

### 💡 **Rotation 2**

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

### 💡 **Rotation 3**

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

### 💡 **Rotation 4**

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 SPO<sub>2</sub> 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**

*Best of luck* 