OSCE
GENERAL OUTLINE

• 5 stations: Time 2 minutes each: Marks - 2 each
• Communication skills
• Anthropometric measurement
• Physical sign elicitation
• Assessment of given clinical scenario
• Interpretation of lab report
• The first 3 are manned stations, the marking of which would be according to the performance. Marks will be divided for each step the student does. Answers of the last 2 stations should be written.
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<th>Reg no.</th>
<th>Point1 (1/4)</th>
<th>Point2 (1/4)</th>
<th>point3 (1/4)</th>
<th>point4 (1/4)</th>
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STATION 1: COMMUNICATION
USEFUL TIPS COMMON TO ALL MANNED STATIONS

• Understand the matter in the question properly
• Greet the parent & Introduce
• Establish rapport
• Explain the matter clearly and confidently
• Clarify any queries by mother/care taker
• Conclude and thank
• Avoid unnecessary history taking; lose precious time & marks
• Avoid medical jargon which the parent may not understand. Talking the common man’s language.
How will you counsel this mother regarding feeding up to 1 year?

(Usually a mother having a small baby aged 4-6 months will be there)
• Is the child exclusively breast feeding till 6 months?
• Start complementary feeds at 6 months.
• Weaning foods- rice & dhal, ragi, banana
• Slowly introduce solid foods used in the family like idly, dosa, plantains, fruit juice, biscuits, chapatti etc.
• Egg yolk at 9 months
• Meanwhile continue breast feeding (at least till 2years of age)
• Child should be on family diet + breast feeds at the age of 1 year.
• No animal milk before 1 year.
• No need to use commercially available formulas/baby foods
Q-2

How will you counsel this mother regarding vaccination of her baby?

(Usually a mother with a baby of less than 1 year age will be there)
• Ask the age of the baby
• Find out what all vaccines child has already received. (Ask leading questions if necessary)
• Explain the forthcoming vaccines
• Mention importance of pulse polio vaccination
• Inform about the availability of the not so common vaccines like pneumococcal, varicella and hepatitis A.
• Stress the importance of vaccines
• Tell about the minor problems like fever and pain which may follow any vaccination and give reassurance (Should not highlight the rare side effects like seizures which may dissuade the parent from giving the vaccine)
• Vit A prophylaxis at 9m, 11/2 yr and every 6 months till 5 year.
7 months old baby is admitted with high fever and one episode of seizures. Lumbar puncture is being planned. Talk to the mother on the procedure to get consent.
Set the stage by repeating that their child is now admitted with fever and seizures

We have to consider the possibility of meningitis (infection of brain)

We need to examine CSF (spinal fluid) for diagnosis

To get this we need to do a procedure called lumbar puncture

In this we’d keep the child on his side, clean the lower back and do a small prick to get a few drops of fluid.

Mild sedation and medicine for local analgesia will be given.

There will be some pain which can be managed with simple analgesics.

Child should be preferably placed in recumbent posture for some time after the procedure.

This is not a rarely done procedure and is not associated with any major immediate or late complications.
• 1 year old child is admitted with febrile seizures. Talk to the mother regarding the prophylaxis.
• This is a common and benign condition
• The brain of the child cannot handle rising temperature, causing seizures.
• This is not epilepsy
• Occurs for children aged 6 months -6 years.
• The child overcomes this problem by 6 years.
• Bring down fever by giving paracetamol and tepid sponging
• Prevent seizures by giving oral diazepam/clobazam
• These are to be given in the initial 2-3 days of fever
A 1 ½ year old child is brought to casualty with watery diarrhea and no dehydration. Talk to the mother regarding the plan of management?
• Ask whether child is being breast fed?, if so it can be continued
• If the child is being bottle fed, tell her to stop.
• All the usual foods being given to the child should be continued.
• Child should be offered more fluids like ORS, kanji water, tender coconut water, lemon juice with added sugar and salt etc.
• The diarrhea usually settles in 2-3 days
• Child should be brought back if there is excess thirst, reduced urine output, alteration in sensorium, high fever persisting after 2 days, persistent vomiting, high purge, blood in stools etc.
STATION 2 : ANTHROPOMETRIC ASSESSMENT
Q-1

Measure mid upper arm circumference of this child and comment?

A 4-5 year old cooperative child is to be kept at this station.
• Introduce and get consent
• Undress and expose left upper limb
• Palpate acromion process above and olecranon process below.
• Use a non-stretchable tape without stiff metallic piece at the end and mark the mid point of these 2 bony landmarks.
• Measure the circumference of the limb at this point with the arm hanging by the side. Measure to the nearest 0.1 cm
• >13.5cm-normal, 12.5-13.5cm-moderate PEM, <12.5cm-severe PEM
• Thank the child and parent
Q-2

Measure the occipito - frontal circumference (OFC) of this child and comment?

A cooperative infant or child of less than 3 years is to be kept.
• Introduce and get consent
• Keep the child sitting on mother’s lap/ on chair
• Use a non stretchable measuring tape without stiff metallic piece at the end.
• Encircle the head with the tape in such a way that the tape goes through just above the ears, through the most prominent part of occiput and supra orbital ridges (maximum diameter should be taken)
• Take the measurement
• Compare with the expected head circumference for the age.
• Less than 3 SD is microcephaly and more than 2 SD is macrocephaly.
• Thank the child and parent
Q-3

Measure the height of this child and comment

Usually a cooperative child of 4-5 years will be kept.
• Introduce, explain and get consent
• Remove the slippers/shoes of the child
• Make him stand on the stadiometer/against a wall looking straight ahead
• His occiput, scapular region, buttocks and back of heels should touch the vertical bar of stadiometer/wall against which child stands. The chin should be straight (Frankfurt plane-Line joining floor of external auditory meatus and lower orbital margin) and biauricular plane being horizontal.
• Bring down the horizontal bar on the stadiometer towards his head (or use a stiff card board) and compress his hair to get the height recording to the nearest 0.5 cm.
• Thank the child and parent
• Compare with what is expected and find out whether normal/stunting
STATION 3:
PHYSICAL SIGN ELICITATION
TIPS

The child who is kept at this station need not always have the clinical sign in question. This station assesses whether you know how to look for relevant clinical signs.

When you elicit a sign, keep telling the examiner what you are doing.
Look for edema in this child?

Patient may be a child who is sitting up or a bed ridden child. He/she need not always have edema.
• Introduce, explain the procedure and get consent.
• Comment whether face is puffy
• Look at the ankles for pitting pedal edema: Press with your thumb just above the medial malleolus of the child for at least 30 sec and look for pitting.
• Look at the abdomen: for distension, smiling umbilicus and if time permits for shifting dullness
• For bedridden children look for pitting edema at sacral region.
• Thank the child and the parent
Q-2

Look for meningeal signs?
• Introduce, explain the procedure and get consent
• Make the child lie down on the couch and stand on his/her right side.
• **Neck stiffness:** Gently and passively flex his/her neck so that chin would touch the child’s chest. Feel for resistance while doing so.
• **Brudzinsky neck sign:** While flexing the neck, if child draws up his/her legs into flexion.
• **Kernig sign:** Gently and passively flex the child’s lower limbs at the hips and knees. Then passively extend the knee, keeping the hips flexed at 90°. Feel for resistance for extension of the knees.(Normally possible upto 135°
• **Brudzinsky leg sign:** While eliciting Kernig’s on one side, if the child draws up the other lower limb spontaneously.
• Thank the child and parent
Look for cerebellar signs ?
• Introduce, explain the procedure and get consent
• Look for nystagmus
• Ask name to find out slurred speech
• Do finger nose test and look for intention tremor, past pointing
• Look for dysdiadokokinesis
• Do heel knee test
• Make the child sit and stand and look for truncal ataxia
• Make the child walk in a straight line
• Pendular knee jerk
• Hypotonia
• If there is no time remaining to make the child walk, tell the examiner that next you would like to see the gait
• Thank the child and parent
Look for clubbing?
• Introduce, explain the procedure and get consent
• Look at hands as well as feet (shunt reversal through PDA can cause differential cyanosis and clubbing only on feet)
• Feel the nail bed for fluctuation
• Look at the nails tangentially for obliteration of the angle between nail and nailbed.
• Look for ‘Shamroth sign’.
• Thank the child and parent
Q-5

Examine facial nerve on right side?
• Introduce, explain, get consent
• Examine the lower part as well as upper part of facial nerve.

• **Lower part:**
  – Inspect for symmetry of nasolabial fold, flattening on affected side
  – Ask to grin to look for deviation of angle of mouth
  – Ask to blow out and palpate the cheeks for resistance offered by buccinator
  – Eversion of lower lip to test platysma

• **Upper part:**
  • Look for Bell’s sign
  • Feel the resistance when trying to open tightly closed eyes
  • Look for the wrinkling of forehead on looking upwards

• Tell that you would like to examine for hyperacusis as well as taste on anterior 2/3\textsuperscript{rd} of tongue
• Thank the child and parent
STATION 4: CLINICAL SCENARIO
A 5 year old child is admitted with 3 days history of reduced urine output, dark colored urine, head ache and vomiting.

– What is the most probable diagnosis?
– What clinical parameter is to be examined immediately and to be monitored further?
– What relevant recent past history you should ask?
– What diet modification is to be advised for the time being?
1. Acute glomerulonephritis
2. Blood pressure
3. Pyoderma/acute pharyngitis
4. Salt and fluid restriction and no fruits.
A 2 year old child is brought with complaints of puffiness of face of week, generalized edema and reduced urine output of 3 days duration.

— What is the most probable diagnosis?
— Name 3 investigations you would order to confirm the diagnosis?
— What is the drug of choice?
— Name 2 most important complications?
• Nephrotic syndrome
• Urine albumin, serum albumin, serum cholesterol
• Prednisolone
• Spontaneous bacterial peritonitis, venous thrombosis
A 4 year old girl is brought with high fever with vomiting and rigors of 2 days duration and left flank pain.

– What is the most likely diagnosis?
– Name two diagnostic investigations.
– What is the drug of choice in this situation?
– Name two most common organisms implicated.
• Urinary tract infection (more specific answer would be acute pyelonephritis).
• Urine culture, USG abdomen
• IV 3rd generation cephalosporins (IV ceftriaxone)
• E coli, Klebsiella
Q-4

A 7 year old boy is brought with bilateral ankle pain and swelling of 4 days, abdominal pain of 2 days and reddish non pruritic rashes on lower legs and buttocks of 1 day duration.

— Give the most probable diagnosis?
— Name 2 acute complications
— What is the drug of choice in complicated cases?
— What is the chronic complication the child may develop?
• Henoch Schonlein purpura
• Acute: intussusception, torsion testis (intestinal hemorrhage also is a complication)
• Corticosteroids
• Renal disease (nephrotic syndrome)
Q-5

A 1 year old boy develops irritability, lethargy and oliguria following an episode of dysentery.

— What is the most probable diagnosis?
— Which organism is most commonly implicated?
— Name 3 most diagnostic blood investigations.
— What is the long term prognosis?
• Hemolytic Uremic Syndrome
• E coli producing Shiga like toxin(E coli 0157:H7)
• Hb, platelet count, Serum creatinine (low Hb, low platelet with deranged renal function tests in this clinical setting is diagnostic)
• Long term chronic renal disease and end stage renal failure may occur (especially in those having neurological problems like seizures in the acute stage).
A 10 year old girl is brought with fever of 5 days duration, migrating joint swellings affecting, right knee, right ankle and left elbow one after the other. She is in severe pain. Her chest is clear, but CVS examination reveals laterally shifted apex, soft heart sounds, S3 and a grade 3/6 PSM at apex.

– What is the complete diagnosis?
– What all laboratory investigations would help in the diagnosis?
– What specific treatment is to be instituted?
• Acute rheumatic fever with carditis - mitral regurgitation.
• Throat swab, ASO, ESR, CRP, ECG, X-ray chest, Echo
• Inj. Penicillin, anti inflammatory: Prednisolone 2mg/kg/day for 2 weeks and then slowly taper while introducing Aspirin 80mg/kg/day for 10 weeks.
Thank You