

OSCE May 2001

Question 1

Young child with ?UTI.

a. List 3 methods for collecting a urine specimen, with their advantages and disadvantages.

Clean catch MSU after perineal wiping (front to back) –

Contamination less likely than bag method. Non-invasive.

Requires older child and co-operation, may take some time to receive sample

Bag (eg Hollister U bag) or adsorbant pad after skin cleaned

Easy to use and apply. Non-invasive. Useful for infants.

May take a while for sample to arrive and likely to be contamination from skin flora.

Suprapubic aspiration

Fast, useful in sick infants. Least likely method to suffer from sample contamination.

Invasive. Theoretical possibility of bowel perforation.

b. Criteria for diagnosis of UTI in child?

Urine culture grows 100,000 CFU's/ml

OR Organisms on microscopy if aspirated sample and performed by appropriately trained person

NB dipstix cannot prove/exclude UTI in children

c. Does the child need follow up?

Yes. Antibiotics until Ultrasound of kidneys/ureters +/-DMSA scan +/- micturating cystourethrogram.

d. If so why?

Significant proportion of children with UTI's will have Vesico-ureteric reflux that in young children can result in renal scarring. This can cause hypertension and renal failure in later life. May also identify congenital abnormalities e.g. structural abnormalities (posterior urethral valves/ polycystic kidneys)

Question 2

Funduscopy. Photo of proliferative diabetic retinopathy.

Annotate the photo.

Microaneurysms

Blot haemorrhages

Hard exudates (lipid)

Circinate above macula (oedema)

Cotton-wool spots (nerve infarction)

Venous irregularity and bleeding

Leashes of new vessels

Photocoagulation scars.

What's the diagnosis?

Proliferative diabetic retinopathy

Question 3

CXR of a right spontaneous pneumothorax and a massive left sided bullae.

a. Would you let your SHO put a chest drain in?

Yes, with supervision if not suitable for aspiration

Another Medical CXR

b. List 3 abnormalities

Question 4

ECG. Broad complex tachycardia. VT.

a. Describe the rhythm?

Broad complex tachycardia. VT.

b. Management of VF?

c. What does the ECG now show?

Posterior MI.

Question 5

X-ray. Lunate dislocation

a. Method of reduction?

Open reduction and intercarpal ligament repair

Alternatively, GA closed reduction

Hyperflexion and dorsal translation of the lunate which converted the injury to a perilunate dislocation. Subsequently, reduce the distal carpal row over the lunate.

X-ray Subtle # of 5th MC

Question 6

Eye photo

a. Diagnosis?

Subconjunctival haemorrhage.

b. Further examination required?

Check can see posterior aspect (and look for signs of base of skull fracture)

Blood pressure

Eye photo 2. Infected ulcer/wound on forehead.

c. Diagnosis

Ophthalmic Zoster (trigeminal nerve)

d. Complications?

Ulcerative keratitis

Corneal scarring

Trigeminal neuralgia

Secondary bacterial infection

Question 7

Childs Elbow X-ray

a. Describe abnormalities

Periosteal reaction on humerus (?Old injury)

Child AP and Lateral CXR

b. List 3 abnormalities

Dislocated hip in child

c. Complications?

Sciatic nerve injury

Avascular necrosis femoral head

Myositis Ossificans

Late OA Joint

Acetabular fracture

Question 8

Patient presents with ?PID

a. 4 symptoms

PV discharge

Lower abdominal Pain

Fever

Systemic upset eg vomiting

b. 4 signs

Lower abdominal tenderness

Cervical motion tenderness

Adnexal tenderness

Raised Temperature

c. 2 organisms

Neisseria gonorrhoea

Chlamydia Trachomatis

d. Definitive test

Laparoscopy

e. Management

Exclude Pregnancy

Analgesia

High vaginal swabs and endocervical swabs

Ciprofloxacin (single dose), Metronidazole (1 week) and Doxycycline(2 weeks)

Advise re: decreased OCP effect and alcohol interaction with Metronidazole.

GU follow up for contact tracing repeat testing/ HIV counselling etc.

Admit under gynae if

Peritonitis, systemic upset, requiring iv analgesia, predicted poor compliance

Question 9

Kid with purpuric rash

a. Diagnosis?

Henoch Schonlein Purpura

b. Acute and long term complications

Acute

Arthralgia/Arthritis - most commonly involving the knees and ankles

Gastrointestinal – Abdominal pain and vomiting (85%), Intesusseption, Bleed

Renal

Nephritic syndrome – Haematuria

Nephrotic syndrome - Oedema

Long term

Chronic HSP

Renal Failure/hypertension

c. Tests

Urinalysis

U&E

FBC

COAG

Ultrasound abdomen (if concerns re:intesusseption)

Renal or skin biopsy would prove diagnosis

d. Follow up

GP test urine periodically (blood or protein) and monitor blood pressure for 6 months.

If normal at this stage then no further follow up necessary. Children with renal impairment need longer follow up by the paediatric team.

e. Treatment

Supportive e.g. fluids and rest

NSAID's for arthralgia (if no renal impairment)

Treat renal impairment/abdo pain/intesusseption as necessary

Question 10

Multi-trauma CXR

a. List 5 abnormalities?

Clavicle #

Rib #'s

Ruptured diaphragm

Pulm contusion

etc.

b. Management?

c. Investigations?

d. Interventions?

Question 11

CXR of Asian lady with TB

a. Describe X-ray

Primary pulmonary tuberculosis

Atelectasis, parenchymal consolidation, lymphadenopathy, pleural effusion and a miliary pattern. Any lobe may be affected, although lower-lobe most common.

Reactivation tuberculosis

Usually upper-lobe involvement with cavitation in 50 percent. Atypical radiographic findings are extremely common in HIV-infected patients

CXR of Smoker with collapse/consolidation

b. Describe X-ray

Question 12

Paracetamol OD

a. Assessment of suicidal risk factors

SADPERSONS

b. Management of delayed presentation

N-acetyl cysteine if $>150\text{mg/kg}$ taken or 12g

Supportive E.g. anti-emetics/analgesics/fluids as necessary

Admit medically

Paracetamol/Salicylate levels

Monitor INR/U&E(creatinine)/LFT's +/- ABG

Involve liver team if failure predicted (INR >2 at 24 hours)

Psychiatric assessment as inpatient