April 1999: OSCE

Question 1

50 year old female smoker X-ray of Lateral Thoracic Spine

a. Describe the abnormality(s)

Generalised loss of density in T12

b. What is your differential diagnosis?

Metastatic lung Carcinoma

Myeloma

Osteomyelitis (TB)

c. What else do you want to examine?

Chest (collapse/consolidation/tracheal deviation/pleural effusion)

TB scar

Clubbing/ hepatomegaly/ lymphadenopathy/ anaemia

Neurological signs (limbs/ sacral reflexes)

Question 2

X-ray Left Shoulder

a. Describe the abnormality(s)

mid clavicle

posterior 2nd rib

pneumothorax

b. How would you treat the shoulder injury?

Broad arm sling

X-ray abdomen. 80 year old chronic schizophrenic from the local long stay mental health ward.

a. Describe the abnormality(s)

Huge dilated loop of bowel originating in the left iliac fossa (inverted U)

(Bent inner tube/ coffee bean sign)

?prominent small bowel loops

b. What is the diagnosis?

Sigmoid volvulus

c. Name two predisposing factors.

Elderly

Chronic constipation (possibly from antipsychotic medication)

d. What is the treatment?

Compression by insertion of soft rectal tube (flatus tube)

May need laparotomy if this fails.

Question 4

Chest X-ray

a. Describe the abnormality(s)

Calcification at the left heart border

Borderline cardiac enlargement

b. What is the diagnosis?

Ventricular aneurysm

c. Why does the patient have haematuria?

Warfarin therapy

d. Why does the patient have a left hemiparesis?

Embolic CVA secondary to mural thrombus

CT Head of 60 year old man fallen 2/52 ago and again 1/7 ago. Now presents with depressed level of conciousness

a. Describe the abnormality(s)

(Acute SDH typically appears on a noncontrast head CT scan as a hyperdense (white) crescentic mass along the inner table of the skull, most commonly over the cerebral convexity in the parietal region)

Biconcave haematoma in the left parietal area

Blood in the ventricle

Blood in the falx

Mass effect with midline shift

b. What is the diagnosis?

Subdural haematoma (?acute on chronic)

Question 6

Man hit in the eye by the branch of a tree. Photo of eye.

a. Name three abnormalities on the picture

Hyphaema

Irregular pupil

Subconjuntival haemorrhage.

b. Name four possible complications

Scleral/corneal Perforation

Corneal blood staining (decreased visual acuity)

Endophthalmitis

Glaucoma

c. Give three causes of a fixed dilated pupil

Third nerve palsy (eg raised intracranial pressure)

Mydriatics (e.g. atropine)

Death or Glaucoma

20 year old man, unwell 2/7 with cough and pyrexia. Presents with reduced level of consciousness after an apparent fit. Photo of crusted lesions on the lips

a. What are the two most likely causes for this appearance?

Stevens-Johnson syndrome

Herpes simplex encephalitis

b. List four investigations

Blood glucose

Blood culture

CT scan

EEG

LP when more alert

c. What treatment would you initiate before diagnosis?

Airway, breathing, circulation with high concentration oxygen via facemask iv Cefotaxime 80mg/kg

iv Acyclovir (check dose with BNF)

d. What are the likely causative agents?

Herpes simplex

Mycoplasma

Drugs (e.g. suphonamides, barbiturates)

Question 8

Photo of person using both hands to hold a sheet of paper between thumbs and fingers. The left thumb is adducted onto the paper, the right thumb is flexed and opposed onto the paper.

What is the name of the test demonstrated? Froment's sign

On which side is the abnormality? Right

What does this indicate? Inability to adduct thumb (1st dorsal interossei paralysed)= Ulnar nerve palsy,

What mechanism is used on the abnormal side? Flexion (flexor pollicis longus) via median nerve

20/40 pregnant woman involved in RTA sustained blunt abdominal trauma.

Initial observations; pulse 110, BP 90/50, RR 32

Give four physiological changes associated with the pregnancy in

a. the cardiovascular system

Increased blood volume

Increased cardiac output

Increase in pulse rate

Decrease in BP

b. the respiratory system

Increased tidal volume

Increased respiratory rate

Decreased residual volume

Hypocapnoea

c. What should the height of fundus be?

The umbilicus

d. Give five signs of foetal compromise

Uterine tetany

Active labour

PV bleeding

Loss of foetal movement

Foetal bradycardia/absent heart sounds

40 year old woman recently returned from a trip to Malawi. Flu like symptoms for one week, then a generalised seizure. On arrival temp 40°C.

a. What is your working diagnosis?

Cerebral malaria, (falciparum malaria)

b. Give four methods of temperature control

Exposure (Remove clothing)

Evaporation (Tepid sponging/fan)

Conduction (ice packs in groin/axilla)

Pharmacological (Rectal paracetamol)

c. What test would help with your diagnosis?

Thin blood films (+Thick films if still used in your centre)

d. Name three other useful tests.

Blood glucose

CT scan

Blood cultures

Urinalysis

(Chest X-ray)

A six week old baby presents with shortness of breath and wheeze after a brief coryzal illness. On examination he has a respiratory rate of 80/min with recession. Auscultation shows bilateral creps and wheeze.

a. What is the diagnosis?

Bronchiolitis

b. What is the most likely viral agent?

RSV

c. Name two other possible viral agents

Adenovirus

Parainfluenzae virus

d. Give three conditions that may increase the severity

Bronchopulmonary dysplasia

Cystic fibrosis

Congenital heart disease

Question 12

Scenario. Asked to give basic life support to a baby manikin, talking through it as you performed.