

OSCE April 2004

Question 1

X ray - Radiolucent lesion developing at distal radius 10 yr old

a. Describe x ray

b. Differential diagnosis

<i>Simple Bone cyst</i>	<i>Osteosarcoma</i>
<i>Osteomyelitis</i>	<i>Ewings sarcoma</i>
<i>Aneuysmal bone cyst</i>	<i>Giant cell tumour</i>
<i>Osteoid osteoma</i>	
<i>Enchondroma</i>	
<i>Fibrous Dysplasia</i>	
<i>Sickle Infarction</i>	

c. Investigations, management

Bone Scan

MRI

Bone biochemistry (Ca/Phosphate/ALkP)

FBC/PV/ESR/CRP

Question 2

Picture of leg with escharotomy

What is it?

Escharotomy for burn, resulted from electrical injury

What else might be needed?

Fasciotomy

Tissues preferentially conducting electricity

Vessels, nerves, skin, muscle

Showed picture of catheter bag: what does this suggest?

Myoglobinuria secondary to rhabdomyolysis

Question 3

Picture and x ray of thumb

a. Describe x ray findings:

osteomyelitis

b. Management

Analgesia

Antibiotics (intravenous benzylpen. And fluclox.)

Blood/swab cultures

Refer to hand surgeons for curette

FBC/U&E/PV/ESR/CRP

Question 4

8 yr old with fracture tib and fib.

a. Describe x ray

b. What are compartment syndrome symptoms?

Disproportionate pain to injury

Pain on passive movement of tendons /m uscles through that compartment

Parasthaesia

Swelling

Pallor

c. Management

Be aware of associated injuries if mechanism suggests (ATLS management)

If isolated injury:-

Check not an open fracture and neuro vascular status

Give Analgesia (intravenous opiates)

Above knee backslab

Keep limb at level of supine patient

Measure blood pressure and compartment pressures if compartment syndrome a possibility (Diastolic minus compartment pressure $>30\text{mmHg}$)

Refer to orthopaedic team

d. Other investigations

Knee and ankle radiographs

CXR/Pelvis/Spinal series as indicated

Compartment pressures if concerns

20 year old, distal tibia with radiolucent lesion

a. Describe x ray

b. Differential

c. Management

d. Investigations (not bloods)

Question 5

Child on return visit to A&E; Kawasaki now diagnosed– already has conjunctivitis, pyrexia,?nodes

a. 2 additional signs to look for

Fissured lips/Strwaberry tongue

Desquamation of palms/soles

b. Investigations – not bloods

ECG (30% get coronary artery aneurysms)

ECHO

c. Management

High dose salicylates

Immunoglobulin

Oral Hygiene

Question 6

Told pt has suspected thyroid storm

a. 6 clinical features

Tachcardia/irregular pulse

Fever

Irritable/Confused/Coma

Tremor

Sweating

Warm peripheries

D&V

b. 3 drugs used to treat

Propranalol

Hydrocortisone

Carbimazole

c. Investigations

ECG

TFT's

Glucose

U&E's

FBC

Septic screen

COAG

Calcium

Question 7

Paracetamol overdose

a. Name class of drugs affecting treatment level used

P450 CYTOCHROME OXIDASE ENZYME INDUCERS

Phenytoin

Carbamazepine

Barbiturates

Rifampacin

Alcohol

St.John's Wort/ Sulphonylureas

b. 3 other conditions affecting which treatment line to use

Malnutrition/ anorexia

Alcoholism

AIDS

c. Calculate dose Parvolex

150 mg/kg	Over 15 mins	200mls 5% Dextrose
50 mg/kg	Over 4hrs	500mls 5% Dextrose
100 mg/kg	Over 16hrs,	1000mls 5% Dextrose

Question 8

Given history; 60 yrs old, collapse, initially, paramedics had difficulty finding pulse

a. ECG: 5 abnormalities

b. Diagnosis

Tri-fascicular block (1st degree block , LAD, RBBB)

Pt has further 'funny do'; new ECG

What does the ECG show?

CHB

Treatment options?

Protect airway and administer high concentration oxygen (85%)

Atropine 500 microg intravenously repeated up to 3 mg total

External pacing

Adrenaline 2-10microg/min intravenously

Call cardiology re: Pacing wire

What asystolic rhythm might he develop?

P wave asystole (ventricular standstill)

Question 9

20 yr old female; short hx illness, no hx alcohol, drugs etc. Jaundiced. Bloods:

Hb 5.1

Plt 91

WCC N

Bilirubin raised

Clotting normal

a. What else would you ask in the Hx?

D&V

Fever

Recent travel

Last menstrual period/ ?on OCP/? Pregnant

b. Further investigations

Pregnancy test

U&E

Blood film

Coombs test

Urinalysis

c. 2 differential diagnoses

TTP

HELLP

Question 10

Hx CCP ? Dissection

a. Chest x ray: Name 4 abnormal features

Double knuckle sign

Wide mediastinum

Calcium sign (>5mm step in aortic wall calcification)

Loss of aortic-pulmonary window

Pleural cap

Left Pleural effusion

Tracheal deviation to right

b. Further investigations

Spiral CT with contrasts or TOE

Aortography if cardiothoracics request

ECG

c. Management

Oxygen

2 large iv access

Opiate analgesia

FBC/U&E/COAG

X-Match 6 units blood

Cardiac monitor

Labetalol to control hypertension

Refer to Cardiothoracic team and involve ITU as will need invasive monitoring to monitor BP

Question 11

Hx abdo pain, polyuria; bloods raised urea

a. CXR – 4 abnormalities

Bilat consolidation ?Sarcoid

b. Diagnosis

Hypercalcaemia

?DKA

c. Investigations

d. Management

Question 12

19 yr old male, RTA, GCS 6-7

a. Give initial treatments

A

B

C

D

E

Primary survey shows isolated head injury, CT no definite injury

b. 2 reasons why

Diffuse Axonal Injury

Brain stem injury

Too soon for signs of contusion or infarct changes to appear on CT