Westmead SAQ – "General" – Time Allowed 40 mins

SUGGESTED ANSWERS – Short General SAQ

Question 1

Ocular Trauma

i) Hyphaema Case (in Black patient)

https://www.optocase.com/archives/hyphema.aspx

This a "Grade 1"

Grade 1 - Layered blood occupying less than one third of the anterior chamber
Grade 2 - Blood filling one third to one half of the anterior chamber
Grade 3 - Layered blood filling one half to less than total of the anterior chamber
Grade 4 - Total clotted blood, often referred to as blackball or 8-ball hyphema

ii) EXAM LOOKING FOR COMPLICATIONS

- Inspection
- Pressures
- Visual acuity (out of 20 or 60).
- Fundoscopy +/- red reflex.
- Extra ocular movements
- RAPD/Pupils
- Detailed Slit Lamp Exam

Investigations would include Coag/FBC in patient of this B/g but question is about Examination finding not investigations

Complications:

Raised intra-ocular pressure (can lead to optic atrophy and glaucoma)
Corneal staining
Corneal opacification
Secondary iritis
Vision loss
Re-bleeding Haemorrhage
Cataracts

iii) Re-bleeding is the major concern = long time visual deficit

- Haemophilia
- Sickle cell disease
- Sickle cell trait
- Idiopathic thrombocytopenia purpura (ITP)

Other reasonable cause of "re bleeding"

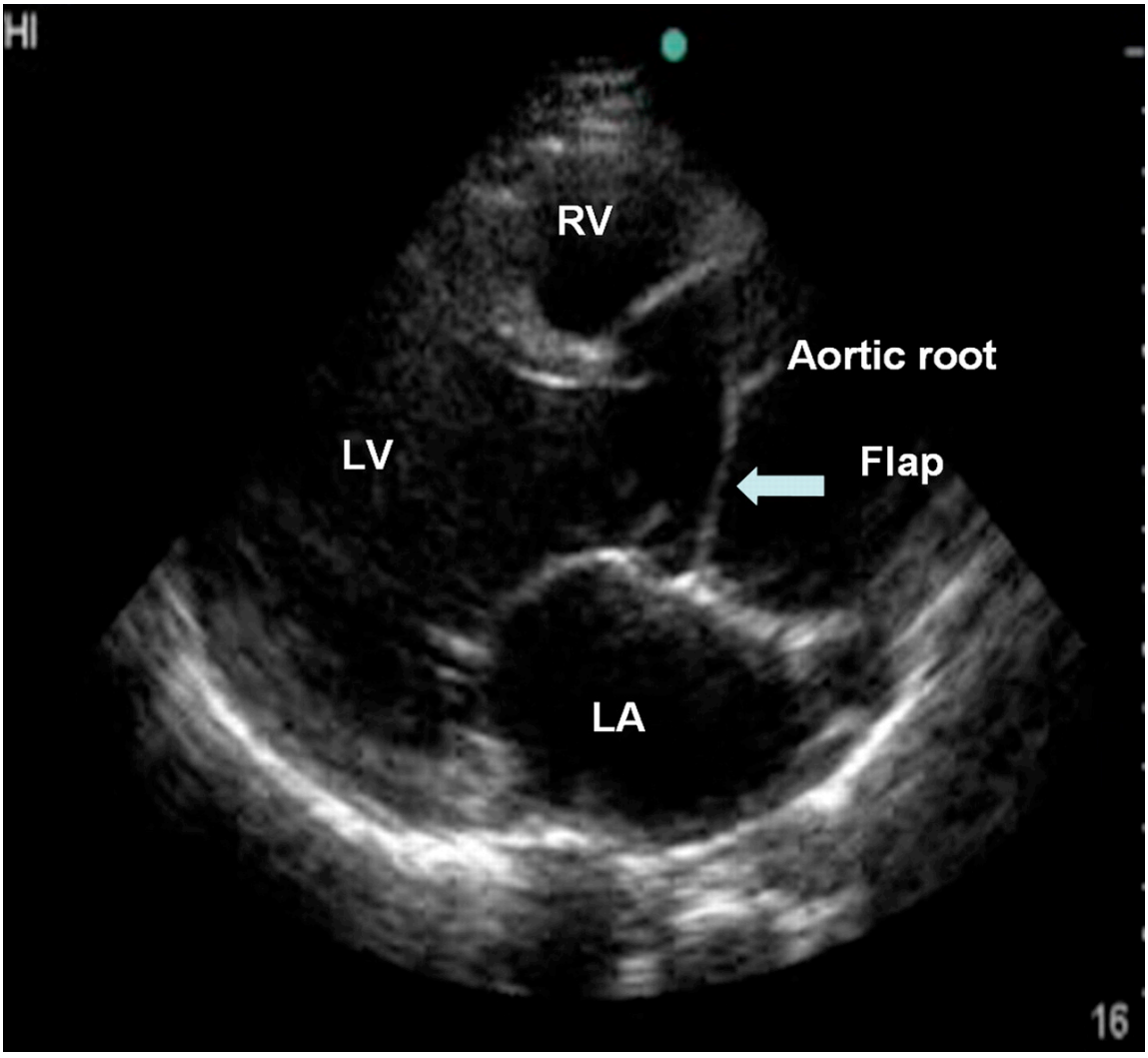
Question 2

I) List four (4) critical diagnoses you would consider and (one (1) risk factor that is associated with each of these diagnoses.
Differentials

a. MI
b. Dissection
c. AAA
d. PE
e. Other reasonable differentials

II) Briefly describe the Echo still image in terms of diagnosis and complications (3 marks)

i. Thoracic aortic aneurysm
    i. Stanford A
ii. No Effusion
iii. Possible Coronary Artery Involvement



Question 3

A Fibula Fracture (single view XR) – significant mechanism

?Part of a maisoneuve inj or tibial plateau inj

Complications – Arterial inj, Peroneal Nerve, Compartment, Other Fractures (Missed)

- Ligamentous injury is also possible

Suggest further XR films

May need CT

May need MRI

Question 4

Prep the Department – People, Area, Equipment, Drugs, Send for help (?internal disaster)

ECG in Oleander Poisoning

39% normal - often have varying AV blocks

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3004167

ECG

Classically get AV blocks and AF

This ECG - no p wave, bradycardia, reverse tick, borderline wide complexes (?escape rhythm)

Diagnosis - ?Oleander Poisoning

Miverva

DigiBind Indications (LITFL)

Acute digoxin toxicity

- cardiac arrest
- life-threatening dysrhythmia
- K >5mM
- >10mg ingested (adult), >4mg ingested (child)
- >15 nM level (>12ng/mL)

Chronic digoxin toxicity

- cardiac arrest
- life-threatening dysrhythmia
- dysrhythmia or increased automaticity unlikely to be tolerated for a prolonged period
- significant gastrointestinal symptoms
- symptoms of digoxin toxicity and coexistent renal failure

Other life-threatening cardiac glycoside toxicities:

- oleander poisoning
- cane toad poisoning (bufotoxin)
- Chinese medicines (e.g. Chan Su, Dan Shen and Lu-Shen-Wan)

Question 5

A Hypertensive Crisis

i) 3 features associated with Malignant Hypertension

Visual Changes

Headache

End Organ Damage

Absolute Number

Secondary Causes (Endocrine, Renal)

ii) 4 causes

COMMON CAUSES

- Acute Renal Failure

- Aortic Coarctation
- Aortic Dissection
- Chronic Renal Failure
- Eclampsia in females
- Hypercalcemia
- Hyperthyroidism
- Pheochromocytoma
- Renal Artery Stenosis
- Subarachnoid Hemorrhage

Need to list 4 reasonable causes of malignant hypertension

iii) Discuss how you would manage this patient's blood pressure in the ED. (3 marks)

Approach – Avoid lowering too quickly:

"Overzealous reduction of blood pressure can result in organ hypoperfusion, and target organ damage can be missed without a thorough evaluation. Properly diagnosing hypertensive emergency and urgency is essential to proper triage and treatment

All patients should be carefully assessed for secondary causes of hypertension"

BP on both arms, Arterial Line, Analgesia, Medications, Titration of meds

DRUG EXAMPLES:

Drug	PROS	CONS	Dosing
Sodium Nitroprusside	PRO – Effective Arterial Dilator CAVEAT - Potentially Toxic (Cyanide)	CON – May increase heart rate Should be 'covered' Unfamiliarity	Infusion 0.5 – 3 mcg/kg/min
Esmolol	PRO - Very short acting (ester group) Easily titrated	CON - Obstructive Lung Disease	Bolus then infusion
GTN	PRO – Effective - Lowers blood pressure – a venodilator	CON – May increase heart rate Tachyphylaxis	Infusion 5 – 200 mcg/min
Other	Other Beta Blockers, Nicardipine, Analgesia		