

## FRCS 3 Glasgow AMMAN May, 2018

My name is Dr. Ijasa Adelehin. I sat for the FRCS part 3 examination on 7<sup>th</sup> and 9<sup>th</sup> may 2018 in Amman, Jordan and passed it at first attempt to the glory of God. I want to say a big thank you to my wife, family members and colleagues who supported me unconditionally on this journey. This is my experience.

### PREPARATORY MATERIALS:

I studied with Kanski, my extensive jotters from residency, FRCS past candidate experiences, FrCS cakewalk, Oxford handbook of clinical medicine (focused on chest, cardio, neuro and emergency). I studied ECGs from Dale Rubin's book on Interpretation of EEG; also read Examination techniques by Chua for clinicals. Overall, the FrCS past candidate experiences (from Prof Chua's website; you can get a compilation from FRCS GO) was the single most important study material. I used it as a kind of syllabus to point me in the direction of things that needed to be read over and over and internalised at a spinal level.

### COURSES

I attended Prof Muthusamy's online university since preparing for FrCS 2. I want to say a special thank you to Prof Muthu who was very supportive and concerned for me when i was having visa issues to Jordan. I am forever grateful to him and his team for their rare selflessness.

I took an online course also with Ophthalmology E-learners academy. This was a beautiful course with wonderful trainers and it demystified the exam completely. I learned so much more in such a little time. A big thank you to them all.

### ORALS

First station: Neuro, Motility, Medicine

#### 1. Pulmonary Embolism

Scenario of a 69 yr old man with a recent history of fractures of the femur. Came to eye clinic and developed breathlessness, chest pain. What is your diagnosis.

"Pulmonary embolism"

"What else can it be?"

"Bronchial asthma, Myocardial infarction"

"Good. Assuming its pulmonary embolism, tell me your management"

I started with history. Breathlessness, pink frothy sputum, history of long distance travel.

"Your patient already has a history"

"Okay.Examination: Pulse..."

"what do you expect?"

"Sinus Tachycardia"

"okay. What else?"

"Jvp, blood pressure, heart sounds,"

"why blood pressure?"

"it affects the management? If systolic blood pressure is below 90. Ill give colloids"

"No. What do you do if a patient with pulmonary embolism presents with low systolic blood pressure?"

"Err its a step wise management. Starting with colloids, then dobutamine, noradrenaline..."

"one answer."

I think he wanted "call for help" at this point but i wasnt getting the hint. I had sleepless nights over this afterwards. Lol.

"Okay, what other examination would you do?"

By now, I was a bit disoriented. "Ill listen to chest sounds?"

"Examination in any other part of the body?"

"Ill look at the legs. For DVT"

"Good. What would you find?"

"Varicose veins, differential warmth, redness and pain"

"Okay, so how will you investigate?"

"D-dimer, CT pulmonary angiogram..."

"Treatment?"

"LMWH..."

"What other type of heparin can u use?"

"Unfractionated heparin."

"What else?"

"Warfarin when INR is greater than 2."

Okay. Next scenario:

## 2. Grandmal seizures

35 yr old Lady presents with grandmal seizures in clinic.what are the possible causes?

"Epileptic having an episode, electrolyte imbalances, drugs overdose..."

"what drug overdose?"

I wasn't sure: "Morphine?"

"No. What else can cause seizure?"

"Preeclamsia (lol)"

"She's not pregnant. Infact she's not even married"

I spent sometime staring at a distance. Blank.

"okay. She's epileptic. What could trigger a seizure."

"Electrolyte imbalances"

"Which one?"

"Hyperkalemia"

"well...it can but not commonly. Which electrolyte can be deranged from sitting in your clinic."

"Hypoglycemia!"

"Yes!"

Phew.

"So what else could cause an episode in an epileptic."

"bright lights...triggers..."

Blank look from examiner.

"Maybe she stopped her medications?"

"Yes! So how would you manage?"

"Call for help, remove her from harms way, ABC, oropharyngeal tube. Lorazepam at 0.1mg/kg repeat at 5mins if no response."

"if no lorazepam, what can u use?"

"Midazolam. Buccal midazolam."

Time up.

"what else?"

"Diazepam."

3. Case of 8yr old boy with pain, lid swelling. Differentials:

Orbital cellulitis, preseptal cellulitis...

"How would you differentiate?"

"symptoms. CT scan."

"treatment."

"admit, labs: Fbc, blood culture, e/u/cr."

"will you wait for results before starting treatment?"

"No."

"Treat"

"Iv ceftriaxone, iv metronidazole, topical antibiotics."

"what if patient doesn't improve in 48hrs?"

"Repeat Labs, ct scan. Might have an abscess that requires drainage."

"what's this drainage called?"

"Err. Orbital drainage??"

"What are the complications of orbital cellulitis?"

"Orbital abscess, compartment syndrome with exposure keratopathy, compression of optic nerve, subperiosteal abscess, cavernous sinus thrombosis, meningitis."

"will you involve any other specialists?"

"Ent, Oculoplastics."

4. Myasthenia Gravis

Scenario of lady with fatiguable ptosis and diplopia. what is the most likely diagnosis:

"what are the signs and symptoms ?"

I mentioned ocular and systemic signs. Including cogans lid twitch, dysphonia, dysphagia etc

"Investigations?"

"Non pharmac: Sleep, ice pack, fatiguability tests. Pharmac: Tensilon test. Serology: Anti Ach, AntiMusk, thyroid function, RF. Radiology: Thoracic inlet xray for thymoma. Myography: Single fibre emg, electromyography.

"Okay. Treatment in 1st, 2nd line etc:"

"conservative: Lid crutches, prisms. Pyridostigmine, corticosteroids, steroid sparing agents. .."

Time up.

Quick one: Case of Non refractive accomodative esotropia. Give the surgical mgt quickly. One sentence"

"bimedial resection"

"Good."

"Thank you."

Anterior segment, Oculoplastics, Lid

1. Fuchs endothelial dystrophy

Picture of central cornea edema and guttata. Scenario of worsening vision in the morning, glare. What's diagnosis.

"Fuchs endothelial dystrophy"

"Differentials"

"increased intraocular pressure."

"What precautions would you take in cataract surgery"

Had a long discussion.

2. Avellino cornea dystrophy. The picture in kanski. "How could this patient present?"

"Recurrent erosions" what is the prognosis?

3. Scenario of cataract surgery with pc rent. Vitreous in the ac. How would you manage? Possible complications of vitreous loss. How do you mitigate against it? How do you do bimanual vitrectomy? Where is the infusion?

4. Causes of refractive surprise. Talked about preop, intraop, post op causes.

5. lol calculation formulas. When do you use what formula?

6.pseudoexfoliation: Picture of bulls eye pattern on lens.

What is the diagnosis?

What is pseudoexfoliative material made off? Where does it come from? Glycosaminoglycans, from ocular tissues: TM, iris.

What are the other ocular findings of pseudoexfoliation?

What do you expect in the angle? "pigments, grey fibrillary material, sampolesi's line."

What precautions would you take in cataract surgery?

How do you manage small pupil? Atropine, mydracaine, intracameral adrenaline, iris hooks.

7. Picture of endophthalmitis. Scenario of a farmer struck by a metal object. How will you manage. What is the cause of raised IOP? What investigations would you do? B-SCAN. What would you see on B scan. How would you treat. Which drugs?

8. Chemical injury

Scenario of guy splashed with cement in his eyes. How would you manage.

"Its an emergency. Id irrigate immediately with normal saline or ringers lactate until ph is neutral. Start corticosteroids and use for first 7days. Topical antibiotics, anticollagenase with doxycycline, sodium ascorbate, sodium citrate"

"What do you expect the IOP to be? Is that important to you?"

"Er, cement is an alkali so it causes liquefactive necrosis. There could be hypotony"

"what else would you be interested in?"

"Damage to periorbita, lids, id also check for limbal ischemia and cornea clarity..."

"what is the long term management? Surgical..."

"Patients are usually not good candidates for pkp. Might do better with keratoprosthesis."

"Before keratoprosthesis."

"conjunctival rodding, conformer...?"

Time up.

## Posterior segment

1. Post Trabec. Shallow Ac. How do you manage. Complete and quite long discussion. Differentials, examination finding, grading of shallow AC, Management of each cause. What is the optic nerve finding in hypotony? Retinal finding in choroidal effusion? "folds, choroidal detachment"

"what are the stages of shallow AC?"

"How do you differentiate the shallow AC of pupil block from that of malignant glaucoma?"

"Malignant glaucoma is a diffuse shallowing. Usually stage 3 with lenticulocorneal touch. And pupil block has more peripheral shallowing with iris bombe and the center of the ac is somewhat deeper."

"Good."

Tricky question here was at the end:"if atropine works to relieve malignant glaucoma, How long will you leave the patient on it?"

"I don't know. Maybe 2weeks"

"No. 1month" (or two months)can't remember what he said exactly.

2. Drugs for medical mgt of glaucoma, mode of action and side effects and caveats for each. I wrote down the mnemonic BAMCOP on the piece of paper given to me and he smiled as i rattled out the drug classes, mode of action and side effects. What would you ask patients before giving each class of drug.

Start with B. (Betablocker).

"Is patient Asthmatic. Ill check pulse also for bradycardia."

"okay next? Alpha 2 agonist"

And so on till I got to P' for prostaglandin analogues.

At the end: An afrocarribean patient about to receive acetazolamide. What would be be worried about?

"sickle cell disease"

"How do you reduce systemic side effects"

"Punctal occlusion"

Good.

2. Choroidal nevus. Describe Picture. What are your differentials. Nevus, CHRPE, Melanoma. Concerns.

What would you tell the patient.

"This is most likely a benign lesion because of the size, presence of halo, distance from disc, absence of lipofuscin,subretinal fluid and its asymptomatic."

Time up.

"Quick: What investigation would allay his fears?"

I was rushed. couldn't remember Bscan. Went ahead and was talking about liver function tests and chest x rays. Nice examiner whispered "ultrasound".

"Yes! BSCAN." I started rattling out B-scan findings of nevus and melanoma as I stood up.

He gave me a thumbs up.

## CLINICALS 9<sup>th</sup> May 2018

### 1. Oculoplastics

Young boy with right eye proptosis. Hearing aids.

Examine this patient. And run commentary.

"I see a young boy with right proptosis."

"Is it axial or non axial"

"non axial"

"Go on."

I went behind him and observed. Brought out a ruler and measured the proptosis.

"give me a value"

"22mm."

The other eye?

"18mm"

"what else?"

I palpated : retropulsion, orbital rim, checked lymph nodes, asked him to swallow.

"what else?"

" extraocular motility: He has limited adduction in the right eye"

Good. Examine on the slit lamp.

"He has a glaucoma drainage device."

"what else in the Ac"

"PI, peripheral anterior synechie inferiorly."

"Good. Whats your diagnosis.

"Glaucoma...intraorbital mass"

"like?"

"optic nerve glioma."

"Good. What would be causing that in this young boy"

"neurofibromatosis"

"Good."

"Come. Examine this man and describe"

## 2nd CASE

"Elderly man. Dermatochalasis. Left lower lid mass. "

What examinations would you like to do regarding the lid mass.

I palpated it, described its size consistency, transilluminated it, mentioned that it has telangectatic vessels.

"what else?"

"No distortion of lid margin"

"good. How would you manage?"

"incisional biopsy."

"why?"

"To determine if its malignant or benign"

"If its malignant?"

"Mohs micrographic technique"

"And if you don't have that?"

"Frozen section"

"what else?"

"wide excision with 3mm margins and reconstruction of defect."

"Good. How would you reconstruct this large defect?"

"Anterior lamella with skin graft or flap. Posterior lamellar with Hughes tarsoconjunctival flap."

"other options for posterior lamellar"

"Tarsal graft from other lid, hard palate, buccal mucosa."

"would you excise only the anterior or posterior lamellar in this case?"

"Er. With Mohs micrographic technique, excision is by lamellar to conserve tissue..."

Time up.

Anterior segment

1. Young boy on slit lamp with cornea graft. I described the graft. Clarity. Sutures. Anterior chamber.

What's the reason for the graft in this young boy?

"Can I see the other eye?"

"Go ahead."

Cornea opacity. Positive munsons sign. "Hydrops from keratoconus"

"Good. What are other possible causes?"

"Trauma, infective keratitis, cornea dystrophies."

How would you manage hydrops?

"Hypertonic saline, bandage contact lens"

Next patient:

Middle aged man. With conjunctival injection. And bilateral cornea opacities. Looked like macula dystrophy but I was concerned about the conjunctival injection so When I was asked for differentials: I said "it looks like macula dystrophy but could be herpetic keratitis because of the injection."

"Okay, other differentials"

"Chemical injury"

"Good. How would you manage?"

"Depends on the diagnosis. Ill start with a history. Family history. History of chemical injury etc."

"If this is macula dystrophy, how would you manage?"

"Counselling. DALK or PKP"

"Good."

Next patient.

Young lady at slit lamp. 22yrs old. Describe what is obvious before using the slit lamp.

"She's wearing glasses. Has an abnormal head turn. Glasses have prisms."

"Good. Now examine"

"Haab striae in cornea. Glaucoma drainage device in Ac. With peripheral iridectomy and a flat bleb from perhaps a failed Trabec. Pupil is round with loss of pupillary ruff. Eccentric pupil. "

"What's that called?"

"Correctopia."

"Examine other eye."

Another drainage device. Hidden in superiomedial quadrant at 11. oclock. Easy to miss. Same cornea findings.

"Diagnosis?"

"Congenital glaucoma. With bilateral glaucoma drainage devices"

"If she comes to your country for follow up. What would you do?"

"History, examination. IOP. Fundoscopy."

"what of refraction?"

"Yes."

"Why?"

"Drainage devices can affect extraocular motility which is why she has prisms"

"Good."

Time up.

Posterior segment

Middle aged man at slit lamp. Fully dilated. Examine posterior segment.

Angiod streaks. With active macula CNV in one eye and macular scarring measuring 5DD in the other eye.

"what are the associations"

Gave them PEPSI mnemonic.

"Do you want to examine his skin for any clues?"

I looked at his arms. Everything was fine. I asked to look at his axilla. Lol.

"what about the neck?"

"peau de range. Pseudoxanthoma elasticum."

"Good. How would you manage?"

"counselling. Multidisciplinary approach. Intravitreal antivegf."

"good."

2nd patient

Middle aged man on slit lamp.

"Look at the disc and periphery."

He had posterior subcapsular cataracts so view was hazy.

" blurred disc margins in both eyes."

"Look at the periphery."

Was tough. View was hazy. "I can see three well circumscribed pigmented lesions. Looks like choroidal nevus."

"Good. What else. Look peripherally"

"Laser marks."

"Great. What else?"

"Ill like to use the BInocular indirect pls"

"Okay." The examiner was super nice. He hurried to latch one to my head.

I didn't see anything else.

"is that area flat?"

I felt it was flat. I reasoned that since laser marks were on it

"Look again"

I looked closely. It was ever so slightly raised. "Oh its not flat."

"Great!"

"What do you think it is?"

"It could be a localized detach..?"

"Yes a retinoschisis. How would you differentiate a retinoschisis from an RD?"

"CVF."

"What would you see?"

"Absolute scotoma in retinoschiss. Relative in RD."

"Good. What else?"

"Oct."

"what of the laser? Which one takes up laser?"



"Retinoschisis."

"Good. Quick see this last patient"

Patient 3. Young girl with grey reflex inferiorly and salmon like hemorrhages.

No time.

Neuroophthalmology

Elderly lady. Do a pupillary exam

Did direct and consensual and swinging light test. Was stopped when I wanted to test her accommodation.

"she has a mild RAPD in left eye."

"Are you sure? Do it again"

I repeated it. It was very subtle. "Yes. Im sure" He didn't seem convinced.

"Inspect. What do you see?"

"Reduced blinking in left eye. Lips deviated to the right side. Prominent nasolabial fold"

What do you think.

"Facial nerve palsy."

"which side?"

"left side."

"Okay. Which examination would you like to do?"

"Facial nerve exam."

"Go ahead."

"She has lower motor neuron facial nerve palsy"

"What test would you like to do?"

"bells phenomenon"

"go ahead."

"she has poor bells phenomenon"

"why is her left eye red?"

"exposure."

"Good. See this other patient."

Patient 2.

"Middle aged man with conjugate horizontal jerk nystagmus with low amplitude and low frequency."

Almost missed the nystagmus. He had prominent features and i was wondering if this was acromegaly.

"perform cover and uncover"

Performed for near and distance.

"He has a left exophoria"

"phoria or tropia."

It was hard to tell. Eyes looked straight and were in constant motion from nystagmus. "ill like to do a hirshberg test pls."

"Okay. Go ahead."

"Its a tropia."

"good."

"see this third patient."

Young lady with abnormal head posture and facial asymmetry.

"Do motility"

"She has right limitation of abduction and narrowing of palpebral fissure."

"Do horizontal motility again"

"She also has left limitation of abduction"

"Diagnosis"

"Duanes syndrome"

"What type?"

"Type one."

"Is this bilateral duanes"

"yes."

"what type is that?"

I wasn't sure. "type 4?"

"Do visual field test. Quickly."

"Ill prefer to use the white target for peripheral and red for central." Time up.

So that's it.

Apart from the worrisome pulmonary embolism question, everything else went okay. I had faith that God had completed what he started in Jesus mighty name. Results came out on June 7, 2018 and I rejoiced.

Final word: Jordan is a beautiful city, the examiners were very very nice and obviously there to help you pass as long as you were prepared. The exam was cost intensive for me as i travelled all the way from Lagos, Nigeria but I thank God that this investment in myself was worth it! I wish you all the very best.

Dr. Ijasan Adelehin

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