

My FRCS Glasgow Ophthalmology experience



Hello everyone,

I am Dr Sangeetha Vijayam S Pai. I completed M.D Ophthalmology (post graduation) in July 2015 from Dr R.P.Centre for Ophthalmic Sciences , All India Institute of Medical Sciences , New Delhi, India .

I gave part 1 of FRCS Glasgow during my residency in 2014 and later gave part 2b in March 2018(exempted from part 2a MCQ paper because I had cleared ICO clinical Sciences). I gave part 3 FRCS in February 2019 at Bangalore, India.

I am extremely happy to say that with God's grace and everyone's blessings and support, I cleared FRCS part 3 in first attempt. It wouldn't have been possible without the huge support of my better half Dr Prashant Kini who is currently a Paediatrician in the U.K. I am deeply indebted to my parents, inlaws and my siblings who are always my support system. Words are not enough to thank the respected faculty of Dr R.P.Centre AIIMS, New Delhi, India, AJIMS, Mangalore, India , East Surrey Hospital , Redhill, United Kingdom and all the faculty of Muthusamy Virtual University of Post Graduate Ophthalmology with special mention to Prof Muthusamy Palanisamy , Prof Vijaya Paranjpe and Prof Ghada for their constant guidance and encouragement while preparing for FRCS. I would also like to thank Dr Koushik Tripathy, Dr Mayank Bansal and Dr Sourabh Sharma who were my seniors during residency, also cleared FRCS and have helped and guided me abundantly during this exam preparation.

For FRCS Part 1, I had studied Basic Sciences in Ophthalmology by John Ferris and few chapters of optics and refraction by Elkington.

I gave ICO Clinical Sciences in April 2016 and cleared the exam. I had studied Kanski 7th edition and did MCQs from The Massachusetts Eye and Ear Infirmary Review Manual of Ophthalmology by Jeffrey.C Lamkin. Hence i was exempted from part 2a FRCS. In the meanwhile I came to know about the Muthusamy University and I got enrolled thereafter.

4.5 years of experience in Ophthalmology is mandatory for part 2 FRCS. Hence I was able to appear for part 2b only in March 2018 at Glasgow. Part 2b has 4 problem solving questions including one emergency medicine question. This part requires adequate preparation because we have to write answer to the point in very less time. My main

reference was Kanski .I would definitely recommend www.mvupgo.com for this part. You can contact Prof Muthusamy directly at his email profpmuthusamy@gmail.com. Also the essay questions by Prof Ghada were very helpful to know the approach to each question. The past problem solving questions given in [Chua Eye Page for MRCOphth/FRCOphth](#) website by Prof C.N Chua is really important too. I actually used to write down all the questions in a notebook and prepare my own answers after referring from Kanski and internet. I even made an index of the topics covered which was really helpful for revision.

I had studied from standard specialty textbooks while preparing for M.D.Ophthalmology. For example Krachmer for Cornea, Stephen Ryan for Retina, Shield's for Glaucoma, AAO series for uvea and refractive surgery, Jacobiec for plasty etc. But for FRCS exam it was not really possible to go through different text books again. Hence I used Kanski 7th edition (which I had during residency)as my main reference.I did not go for 8th edition as I got to know that many topics were removed from the newer edition. To be honest, I would say Kanski is a very good book for revision if you already have a good base in Ophthalmology. The information given is very condensed but it has covered almost all the necessary aspects from all specialities in one textbook. Hence at this stage I found Kanski super useful as I could revise the things that I had learnt from multiple sources earlier.

For the emergency medicine question, I studied life threatening emergencies and Medicine emergencies from Oxford Handbook of Emergency Medicine. I was always interested in General Medicine .So I did not find this part difficult.

All questions have 4 sub questions each.We just need to answer to the question rather than writing an essay on the topic.

1.Pregnant diabetic female in second trimester comes to you for blurring of vision. On examination vision is 6/12, neovascularization of disc present both eyes.

- a.What are the factors which cause progression of disease?
- b.How will you investigate?
- c.What will be your treatment plan?
- d.How will the treatment change if there is progression?

2. You started consultation in a clinic which was run by an Ophthalmologist who is no more.One patient comes to you with previous diagnosis as' pseudotumour' . He was prescribed steroids for a long time.He is saying he was admitted recently in hospital for acute pancreatitis.He also had a history of hepatitis in the past.

- a.What is the diagnosis?
- b.What are the alternative treatment options?
- c.What are the side effects of alternative treatment?
- d.What are the long term complications this patient is suspected to have ?

3. A 2 year old child with bilateral cataract. No associated syndrome, clinically normal child.

- a. Investigations?
- b. Indications for surgery?
- c. Treatment of this child?
- d. How will you counsel his parents?

4. A 60 year old diabetic female, waiting in your clinic, suddenly collapsed as she entered your consultation cabin.

- a. What is the diagnosis and What will you do?
- b. Treatment?
- c. It turns out that there are no signs of life. What will be the management plan?
- d. How can you prevent hypoglycemic episodes in a diabetic?

The difficult part came later. The Royal College Glasgow introduced a newer system of centre allocation for part 3 and it was random (based on lots). Hence I was not sure when I would get the centre. I applied for the first possible diet in 2018 (New Delhi/Jordan/Oman). Unfortunately I did not get any centre for the exam. I again had to wait till the next diet (Bangalore/Malta/Jordan). Luckily I got the centre in Bangalore in February 2019. Many of my friends didn't make it even in the second diet. I would say that random allocation has made the whole process very difficult.

I did clinical attachment in various specialties in East Surrey Hospital, Redhill, United Kingdom while preparing for FRCS part 3. It helped me hone my clinical skills without which I wouldn't have been able to succeed in this exam. I also went through many latest guidelines of Royal College of Ophthalmologists London. I would definitely recommend doing clinical attachment or short term observership courses in various subspecialties under senior consultants. It really boosts our confidence as they are the right people to guide us about how to approach an exam case without panic.

Again www.mvupgo.com was very helpful for me to prepare diligently for part 3. The medicine questions sent by Prof Vijaya Paranjpe receive special mention. I also revised the emergencies from Oxford Handbook again as there was a special viva section for medicine questions in the oral exam. The whole Chua Eye page is very very important when we prepare for FRCS part 3. The past exam experiences are definitely worth reading. I was able to go through the last 50 of them in detail. It gives a vivid picture of the oral and clinical exam. Apart from the past experiences, I did various picture quizzes, viva challenges, viva survival etc. I would also recommend [Eye Rounds.org website by University of Iowa](http://EyeRounds.org). Going through the clinical cases and picture quizzes were really helpful. Reading the [Examination techniques by Chua](#) is a must for the clinical exam. Thanks to all seniors who have shared their exam experiences in Chua website. I again had my own notes which I prepared during part 2 as well as part 3 exam preparation. I used to start with a past exam experience, go through all the questions in detail and find their answers from Kanski or my notes. My internet references were aao.org, RCOphth guidelines, medscape and sometimes eyewiki.

Apart from Kanski, I had the FRCS cakewalk book by Dr Mamta Mittal. But I could only read few chapters like ocular pharmacology and the initial clinical examination which were useful. Whatever we have studied, we have to revise atleast once to remember things. Basically we need to know the discussion part for oral exam. Also they don't ask anything related to ocular pathology or surgical steps except cataract surgery in different circumstances(because that is considered to be basic knowledge). For clinical exam, all that matters is clinical skill and time management. An efficient practice of fundus examination with 90D lens in undilated and dilated pupils is necessary. We should be thorough in examination of fundus with direct ophthalmoscope as well as binocular indirect ophthalmoscope. I also checked YouTube videos for clinical examination techniques(lots of videos available on slit lamp techniques, ptosis and proptosis examination, squint examination etc). I also watched one or two video lectures on OCT and corneal topography in YouTube.

MY VIVA EXPERIENCE

I had oral exam on February 2nd 2019.

The venue was Sheraton Grand Hotel, Bangalore. I was tensed when I reached the venue, but later had nice conversation with my fellow candidates which helped me ease my tension a lot. Then the registration started .

There were 3 separate viva tables of 20 minutes duration. At each table 2 examiners were present and each of them asked questions for 10 minutes.

1. My first table was General Medicine , Neurology and motility.

General Medicine- A British examiner was there. He asked me the characteristics of chest pain in respiratory and cardiac disorders. Then he gave a clinical scenario of a 37 year old male who underwent systemic surgery having pleuritic chest pain on second postoperative day and asked for the diagnosis. I told I would like to start from the history with special mention to the type of surgery (prolonged ? spinal). He asked me why? I said to rule out pulmonary embolism. He agreed. He asked me all the details about pulmonary embolism, risk factors etc. Also asked about how DVT causes pulmonary embolism (veins of leg drain to inferior venacava and enter right ventricle and from there pulmonary artery). He was happy. Then he asked about investigations and treatment. He asked about Warfarin in detail, it's side effects, drug interactions with antiplatelets . I could answer them. He also asked about other oral anticoagulants(dicoumarin). Later he told these details are not expected from an Ophthalmologist. He asked about other differentials. I told pneumonia , pneumothorax. He asked me how to differentiate between these conditions? He asked me what finding I will see in trachea? It didn't strike me at that time but later I realised that he asked about tension pneumothorax (tracheal shift).

Neurology and motility- An examiner from Middle East was present. He started with a scenario of a 37 year old male with LR paresis followed by MR paresis and diplopia and asked for differentials . I said Myasthenia Gravis first, he asked for more differentials to

which I said Kearns Sayre but I corrected myself saying there won't be diplopia in that . I thought of thyroid eye disease only at the end (because in my mind I was thinking that in TED , IR is affected first then MR). He also asked about management and role of prisms(chances of varying levels of paresis and diplopia, hence prism is not a definite treatment).

Then he showed a picture of AAION and told it is of a 70 year old patient . I said Giant cell arteritis. He asked details about it's treatment, side effects of steroids, precautions before starting steroids with special mention to blood sugars.

Last scenario was of myasthenia gravis(diplopia with chronic cough). He asked about the investigations and treatment.

2. Second viva was Anterior segment/ Oculoplasty

Both were Indian examiners.

First examiner showed a classic picture of pseudoexfoliation. The discussion was about PXF material, problems encountered during cataract surgery, how to deal with them etc. He also asked about cataract and glaucoma in PXF.

Then he showed a photo of hazy cornea with descemet folds in an old patient and told it is bilateral. I said that the diagnosis was Fuchs endothelial dystrophy. He asked about management.

Then he asked about differentials of a lid swelling in 7 year old boy - I told preseptal/orbital cellulitis would be my first differential. He asked how to differentiate between both of them. He also asked about features of aniridia.

Second examiner started with a picture of dendrites on cornea and asked about differentials, management of Herpetic epithelial keratitis (including HEDS and debridement).

Then he asked about how to do cataract surgery in cases with endothelial compromise(start from pre op always-to be operated by an experienced surgeon, then operative - viscoelastics, fast phaco, prefer chopping ,avoid DMD, BSS solution ideal etc).

He asked about identification of PCR intraoperatively. He asked what happens to the pupil during hydrodissection when PCR occurs? I said that the pupil constricts. He agreed and asked for the name of the sign. It is Pupillary snap sign.

He then showed me photo of a lower lid nodule and asked about differentials. I told about BCC,SCC,Papilloma etc . He agreed and asked about the diagnosis if the patient is immunocompromised...I told Kaposi..but it didn't look like Kaposi sarcoma..he asked what else if it is infectious. Then I told molluscum contagiosum. But the umbilication was not clear enough to recognise it as molluscum. He asked about management of molluscum.

****A general tip for viva- Always start your answer by describing the the type of image (slit lamp photograph/FFA/fundus picture etc)taken , describe the lesion that you see(size,colour,shape etc)and then start from history. Don't jump to the diagnosis ever unless they ask you specifically .**

3. Third and final viva

First was a British examiner. He showed me a picture of retinal vascular occlusion and asked about management. It was BRVO. I told about all treatment options. He asked me about the dosing regimen of intravitreal injections.

Then he showed a picture of rhegmatogenous retinal detachment with tear and asked about management options and advantages of PPV over buckling and vice versa.

Finally he showed an FFA and said it was of a Nigerian male. It clearly had capillary non perfusion and neovascular tufts. I told my answer as proliferative sickle cell retinopathy. He was happy.

Second was a lady examiner. I expected the viva to be about posterior segment too but surprisingly she asked only about glaucoma.

She showed me a disc photograph and asked to comment on it. It was a large disc with nasalisation of vessels, and temporal crescent, apart from that NRR was healthy. I told it can be myopic disc. Then she asked about other differential. I went with early glaucoma. She agreed. Then she asked about the glaucoma investigations in that patient and risk factors for progression.

Next she told a scenario of a patient with symptoms suggestive of acute angle closure glaucoma. She asked about the signs and management in detail especially about all the topical medications. I answered everything.

At the end she asked me about EAGLE. Then the bell rang. I told quickly that it is a study done in ACG to study the role of early lens extraction. She told OK..

Thus the oral exam was over. Overall I was satisfied with my performance.

I had a day off in between. Make sure you practise all the tests in plasty and squint on somebody. Also practise examination using a systematic approach so that you won't miss anything while examining.

MY CLINICAL EXAM EXPERIENCE

Clinical exam was on February 4th at Narayana Nethralaya. We had to wait for a long time before we were called for the registration.

Examination was conducted in 4 OPD cabins. At a time 4 candidates were called and asked to go to each cabin. Each cabin was occupied by 2 examiners, 1 observer, 3-4 patients (patients are changed in between) and 1-2 translators. So the room was already crowded. Time for clinical exam is very very short. The bell rings by the time we enter the cabin. Once we enter the cabin, the examiners will introduce themselves, and then we are asked to sit and the patient also is seated. 1-2 minutes easily pass by the time we even start examining the patient. Then we have to give instructions to the patient in English and the translator translates it to the patient in local language. So there is going to be a delay in the whole process. Be prepared for that. I carried instruments like two torches, two scales, occluder, fixation target etc. But there was no need to carry anything as all instruments were available there. The actual time available to examine one patient will only be 3-5 minutes

maximum(if there are 3 patients, then it is actually 3-4 minutes per patient!!). Total time for one station is 12 minutes. Also there was no time for any discussion after we tell our examination findings. Everybody will be given two cases. It is good if we are able to examine 3 cases in a station because even if something goes wrong in one case, we can balance the marks with other two cases. So the key to success is that we have to examine really fast.

1. My first station was anterior segment

I was asked to examine a 10 year old girl. The examiner asked me to just observe her and tell findings. I told that she is a young girl probably 8-10 years old with spectacles and her right eye had esotropia. Spectacles neither looked like myopic nor like hyperopic. He asked me what kind of spectacle it was. I told it can be hyperopic as her eyes have intermittent esotropia. I was asked to examine her left cornea and to tell only the positive findings. There is no time to start examination from conjunctiva or lids. I told operated keratoplasty with sutures intact etc etc. He asked me about the type of graft. I couldn't see the interface, so I told it is penetrating full thickness keratoplasty. He agreed. Then he asked what condition it can be? I said corneal opacity or keratoconus. He asked me to examine other eye. It was early keratoconus(mild thinning inferiorly with prominent corneal nerves). He asked about management and CXL.

Second was a male patient in 40s. He had peripheral iridectomy superonasally. But I couldn't see any bleb in the first go. But there has to be a trab done if there is a peripheral iridectomy. He asked me to examine the other eye too. It had a bleb. Then I told failed bleb in the first eye. He asked what can be the cause for glaucoma in that patient. I said all differentials for glaucoma in a young person(JOAG, uveitic, pigmentary etc) he was not happy...He wanted the specific diagnosis. Finally I said steroid induced glaucoma to which he agreed.

Third was a male patient in 50s or so. He had inferiorly decentered IOL in one eye with irregular pupil margins. Other eye was normal. I saw vicryl sutures nasally and temporally. I said scleral fixated IOL. He asked why SFIOL is done in this patient? I said complicated cataract surgery with PCR as the answer, so SFIOL was implanted. The bell rang and time was over. It seems he specifically wanted to hear blunt trauma induced cataract surgery, but there was no time left.

2. My second station was posterior segment.

I was asked to examine left eye fundus of a middle aged female with indirect Ophthalmoscope. She was very uncooperative and was continuously moving her eyes. Her pupils were 5-6mm. Somehow I saw multiple pigmented spots in the periphery, disc was pale, with attenuated vessels. I told my findings. Examiner asked me to examine with 90D lens too. Again she was moving her eyes a lot and uprolling her eyes. I told the examiner that she is moving her eyes a lot. He also understood that. Then he asked me to see the inferior retina somehow through 90 D lens. I could barely see anything, somehow I saw

reddish haze inferiorly in between her eye movements . I assumed it as vitreous hemorrhage. Examiner asked me the diagnosis. I told my findings and I correlated everything and said that it was lasered PDR. It was correct.

Second was a lady examiner. She asked me to examine a male patient's macula. She kept saying examine fast as there was not much time . I told that the macula was not normal, had ERM, hard exudates surrounding it, also a pseudohole. She showed me his OCT later and asked to identify the pathology, I was very happy that all my findings were correct as they were present on OCT including lamellar hole. She asked me how to measure macula size clinically? I told macular pathology is usually compared with disc size clinically. I didn't know what she meant. I said disc size is calculated according to the correction factor for each lens ($1.3 \times$ disc size in mm).She told OK. Then she asked how I examined the vitreous in slit lamp? I told I didn't look for vitreous. I used retroillumination to see the fundus in slit lamp. She kept asking about the vitreous examination .We can usually see the anterior vitreous in slit lamp examination. May be she meant the red free filter...I still don't know what answer she wanted.

I could examine only 2 cases in retina. Even though first patient was highly uncooperative, I was happy that my diagnosis was correct in both cases.

3. Third station was Neurophthalmology and squint.

It was the most difficult station for me.

First case was to examine visual fields in a middle aged female. I adjusted my seat to bring it to the level of the patient , still the examiner was insisting on adjusting it again. I gave instructions to the patient and started examining. She told she can see everything in the peripheral fields(repeated twice) .Then I checked central field, I asked for a red pin . She said it is blurred and cant' say which colour it is or how many fingers I showed. I told all these findings as I examined her. Then I said I would like to examine her optic discs. I had central scotoma in my mind. When I examined her right eye , I could see mild temporal disc pallor(not very prominent though, but had to say as everything else was normal), thus I told my finding. He said examine other eye too. I could see some disc pallor temporally. So then he asked whether the findings correlate? I was thinking in my mind that her peripheral fields were full and she only had central field problem , but there is no complete disc pallor. I was confused. May be hereditary optic neuropathy or so .But before I could say something, the time was over . I felt really bad. I got to know later from other candidates that the lady wasn't giving consistent findings to most of the people(may be she was acting, otherwise how did she count the exact number of fingers I showed in her peripheral visual field?. Examiner asked few candidates to repeat visual fields after the optic disc examination if they had time and some candidates even said that for them it was bitemporal hemianopia and the patient clearly told them that she can't see anything in peripheral visual field. So I really don't know what actually was the case.)

Anyways it was a bad experience for me, I did my tests well and I told the findings which I got.That's it. I don't know what the lady actually had. Practise field examination well, use white pin , red pin etc.(Lot of time went in translation of instructions by the translator)

Next case was a middle aged male patient. I was asked to examine him. That's it. Nothing specific. First of all I saw that he had right eye hypertropia with inferior scleral show. I started with Hirschberg's test. There was right hypertropia, no horizontal squint. Then I said I would do cover uncover test for near and distance. The findings were perplexing. On cover test, no movement at all in either eye. On cover uncover test, right eye fixed, left eye went upwards from down. I told hypophoria in left eye. I was already running out of time. I checked motility from primary gaze to left gaze first, then checked left elevation and left depression, then the examiner asked me to tell my findings. I told right eye movements were normal in left gaze. He asked about the left eye. I said there is limitation of movement of left eye in upgaze. It was limited, not completely absent. Then he said yes there is restriction of movement. Bell had already rung. I actually don't know what the case was. Maybe left IR restriction, but RE was hypertropic and had inferior scleral show..? Blow out fracture RE.. Anyways I was very sad after this station because I couldn't complete the examination to formulate a diagnosis. I didn't think we would be getting such complicated vertical palsy cases in squint. So altogether the whole station was bad for me and no time to see third case. (Time is very limited, unless you get an easy horizontal squint). After the exam, I came to know that this particular case was difficult for everybody.

4. The next station was oculoplasty. I suddenly realised that this is going to be the last station and the exam is going to finish. I was partially happy but the previous station was still in my mind.

First patient was a young girl around 20 years of age. I was asked to observe. You have to tell all findings that you see even if it is not relevant to the case because we are seeing the patient as a whole first. I told she looks very weak and tired, with severe ptosis in right eye and moderate ptosis in left eye. He asked about the diagnosis. I told myasthenia gravis. I said I have to examine motility. It was normal in both eyes. He asked all differentials and how to rule out each of them. I ruled out third nerve palsy, Horner's syndrome, Kearns Sayre, Myotonic dystrophy (I noted she had an absent digit while shaking hands). I was asked to examine ptosis, LPS action etc (was 6-7 mm). Lid crease was present in both eyes. So congenital ptosis was unlikely.

Second was male patient in 50s. I was asked to observe. He had mild ptosis in both eyes due to dermatochalasis, a scar above right eyebrow and an intermittent divergent squint in LE. Above all, he was sleeping in between while sitting on the examination chair.... Then the examiner woke him up.

Then he asked me whether I know about pseudo ptosis.. I said the answer and causes. Clinically it was not prominent in this patient. He asked me how to confirm it?. I said that we can confirm it by Hertel's exophthalmometer. He asked me to use it. For the right eye I got a measurement. Left sided prism was totally hazy, I couldn't even read the measurement, the examiner tried to help by shining a torch on the prism so that I could see the reading in left eye. Then he asked me to measure with a scale... I finally used my scale to measure and got the reading as right eye 14 mm, left eye 18 mm. I said yes there is definite enophthalmos in the RE.

Third was a small boy aged 5-6 years sitting happily on a chair. It was a spot diagnosis. It was blepharophimosis epicanthus inversus syndrome. I said all the findings and explained it and the bell rang.

Finally the exam was over. I was not happy because of the neurophthal and squint station. I think I did well in the remaining stations.

I am very happy that I cleared the exam.Thank God.

So finally what I have to say is that be prepared to face cases with mixed and complicated findings . Don't panic, just tell your findings and if possible the differentials . They assess our examination techniques and ability to pick positive findings more than the diagnosis, because there is actually no time for a detailed examination. In conclusion, it is a short case exam conducted like a spotting exam(in terms of time allotted).

I think I have covered all aspects of my FRCS exam . Feel free to contact me at sangeetha.vijayam@gmail.com if you have any queries related to FRCS exam. I would be happy to help. Wish you all the best .

Yours sincerely

Dr Sangeetha Vijayam S Pai

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