DOI: 10.1308/rcsbull.2017.137

Surviving the Intercollegiate Specialty Examination in General Surgery (FRCS)

Helpful and practical tips to get you through it, bit by bit.

ND Appleton ST8 General and Colorectal Surgery
R Kalaiselvan ST8 General and Colorectal Surgery

St Helens and Knowsley Teaching Hospitals NHS Trust, Merseyside

Success in the Intercollegiate Specialty Examination in General Surgery, Fellowship of Royal College of Surgeons (FRCS), is a mandatory requirement for the award of a Certificate of Completion of Training (CCT) or a Certificate of Eligibility for Specialist Registration (CESR). It allows the trainee to formally demonstrate that he or she has attained the standard of clinical competence required of a newly appointed general surgical consultant. In line with the GMC Postgraduate Board's statutory requirements, the examinations are regulated by the Joint Committee on Intercollegiate Examinations (JCIE) on behalf of the four royal surgical colleges of Great Britain and Ireland.

There is no doubt that this is a potentially stressful time for senior surgical trainees. Nearing the end of training, multiple facets of surgical competencies are additionally required alongside a busy job and personal life. Moreover, the realisation that the trainee's eligibility to sit the examination is within a two-year timeframe from potential consultancy add to the pressures and stakes involved. Consequently, the aim of this article is to provide a general overview of the application process and exam format, with practical advice on how to survive the FRCS examination.

HISTORY

The Royal College of Surgeons of England introduced the FRCS, which included an examination in anatomy, in 1844. In 1867, this was extended to the Primary FRCS Examination in Anatomy and Physiology. It remained largely unchanged for nearly a century, when pathology was included by all the four royal surgical colleges. As knowledge and skills expanded in the 19th century, it became increasingly apparent that the current examination was no longer completely satisfactory. The Royal College of Physicians and Surgeons of Glasgow, therefore, introduced the first multiple-choice questions in 1969.[1] Since then the examination has been refined into its current-day format, with the JCIE Internal Quality Assurance Committee ensuring that the highest possible standards are achieved.

APPLICATION PROCESS

Currently, online application and payment is via the JCIE website (www.jcie.org.uk). CCT trainees must have been medically qualified for at least six years, have passed the MRCS examination and received a successful ARCP Outcome 1 at ST6 level. Speciality and associate specialist (SAS) doctors and overseas candidates need to achieve the equivalent competencies as their CCT trainee colleagues. Completing the online application form is straightforward and requires three structured references from senior colleagues/consultants, one of whom needs to be the trainee's current Programme Director. Approaching referees early beats the submission deadline and avoids disappointment! Supplemental information required includes a current curriculum vitae and up-to-date copy of the candidate's operative logbook. Confirmation of successful application is received in the post.

EXAMINATION FORMAT

The examination is divided into two sections – the written and the clinical sections. Candidates have up to a maximum of seven years (pro rata for less than the full-time equivalent) to complete the examination process.[2]

SECTION 1

The written test consists of Paper 1: Multiple Choice Questions (MCQs) (2 hours) and Paper 2 : Extending Matching Item Questions (EMQs) (2.5 hours). Both are sat on the same day and are computer-based tests held at local driving test centres throughout the UK and Ireland. Getting advice on the noise levels in your local test centres can aid your choice of venue. You may be the only individual sitting the FRCS exam while others are attending for their driving theory test! Some centres may offer private rooms if you write to them in advance.

The questions are predominantly scenario-based and designed to cover the breadth of the current Intercollegiate Surgical Curriculum.[3] A combined pass from both papers is required to proceed to Section 2, with the overall average pass percentage (February 2016) for CCT trainees being 76% and 41% for non-CCT trainees.[2] Candidates have two years from their first attempt – with a maximum of four attempts – to gain eligibility to proceed to Section 2, with no re-entry thereafter.[2]

SECTION 2

Section 2 is the clinical component of the examination that takes place over two days. From January 2015, the clinicals take the format of one general surgical clinical viva and one nominated subspecialist interest clinical viva (eg breast, colorectal, endocrine, oesophago-gastric, transplant, or vascular surgery). There is one long case (20 minutes) and two short cases (10 minutes each) in both stations.

The orals are scenario-/patient-based structured interviews consisting of 4 30-minute vivas. The four themed stations are emergency surgery/trauma/critical care, general surgical principles, subspecialist interest surgery and finally an academic viva (critique of an academic paper) alongside questions on applied anatomy, physiology and pathology. Success in Section 2 promotes the candidate to the fellowship of their nominated college.

PREPARATION FOR SECTION 1

We would recommend starting preparation for Section 1 at least three months in advance. By the very nature of a surgical registrar's job, sticking to a rigid study plan can be difficult so think twice about trying to revise absolutely everything in depth! Popular helpful texts could include: *Bailey and Love's Short Practice of Surgery* (Hodder Arnold); *The Companion to Specialist Surgical Practice Series* (Saunders Elsevier); *The ATLS Manual* (American College of Surgeons); and *FRCS General Surgery: 500 SBAs and EMIs* (JP Medical Publishers). It is worth choosing a standard text for the greater detail required

of your chosen subspecialty and remembering to revise your basic sciences.

Exam technique can be practised by subscribing to websites such as www.onexamination.com and/or www.eFRCS.com, which give access to hundreds of MCQs and EMQs. This online revision consolidates your knowledge and develops the mental stamina required to face 120 MCQs and 135 EMQs all on the same day! Closer to the exam, try to complete at least one mock exam a day. The results are emailed to candidates within a month.

PREPARATION FOR SECTION 2

From the outset, it is important to discuss the implications of this section of the exam with your current consultant. An ideal time to do so is while creating your Learning Agreements at the beginning of your rotation. By encouraging them to informally viva you over the operating table while on-call or during a teaching ward round, you will become accustomed to vocalising and structuring your answers. In addition, earn the support of your fellow team members. That way, your colleagues will not mind covering you while you peel off to an extra clinic other than your own subspecialty! Offer to provide teaching sessions for the junior doctors and medical students as a mutually beneficial way of educating them and reinforcing your own knowledge.

Consider using your day job as a way of simulating the examination. View on-calls and clinics as learning opportunities and exam practice. If you are able to do so, see this as a bonus, not as an imposition to your study regime. Arrange vivas/teaching sessions with consultants in other surgical specialties, anaesthetics and critical care and, if possible, help out with their clinics/ward rounds. Closer to the examination date, organise yet more viva practice with those who have an eye for detail and with senior trainees who have recently completed their FRCS. Most regional SpR teaching days will have viva sessions arranged; use these to your advantage. Additionally, request that your consultants critique your physical examination techniques and communication skills with patients. Post-take ward rounds are ideal for this.

If it is possible, link up with another colleague or form a study group with those sitting this part of the examination at the same time. Meet and question each other in a healthy and constructive fashion. If this is not possible, use internet-based video conferencing tools such as Face Time, Google Hangouts or Skype to link up. Thirty minutes chatting about a topic can equate to three hours of bookwork.

Additional helpful texts to those already mentioned above could include: *Cracking the Intercollegiate General Surgery FRCS Viva* (CRC); *FRCS: Companion Cases for the Intercollegiate Exam in General Surgery* (Anshan Ltd); *Surgical Critical Care Vivas/Applied Surgical Physiology Vivas* (Cambridge); *Landmark Papers in General Surgery* (Oxford); and *An Introduction to the Symptoms and Signs of Surgical Disease* (Arnold). UK courses aimed at practising exam technique and consolidating knowledge are held at differing times of the year; in Liverpool (January), the Alpine course (January – for those keen on skiing in the Alps – and June in Chill Factore, Manchester) and Whipps Cross (May). Apply early for these courses as some provide two tiers of training – full participation versus observation only. Furthermore, masterclass or subspecialty update meetings can be helpful in bringing you up to speed on the latest relevant hot topics.

It is worth choosing a standard text for the greater detail required of your chosen subspecialty and remembering to revise your basic sciences

The non-academic surgeons need not worry about critiquing a paper. Practise your technique by selecting a few papers from recent subspecialty journals and present to your study group and/or consultants. Familiarise yourself with the basic definitions in statistics: for example, confidence interval, *p*-value, impact factor, etc. This section is not to look for academics; it is to assess your interpretation of medical literature and evidence-based medicine.

PRELUDE

Notification of the Section 2 examination timetable is posted in advance and it is worth checking and double-checking your personal exam schedule. You can be allocated to do the clinicals or viva in any order. We would recommend staying in the hotel where the exam is held (alongside the examiners and other candidates); this will enable you to relax between the viva sessions in the privacy of your own room and also reduces the need to travel on the day of exam. Travelling to the venue by public transport in good time allows you to again relax and finally polish off your revision.

ON THE DAY

On the day of the exam, a little nervous energy is not a bad thing. All of the candidates are briefed first thing by the Chair of the Intercollegiate Speciality Board in General Surgery, during which it is reiterated that the examiners are there to pass you. You are also informed of the marking scheme (available to download from www.jcie.org.uk) and that it is possible to fail a particular station then still go on to pass the examination by compensating on other areas.

Like any interview scenario, dress confidently in a smart suit. It is good practice to smile and answer in a structured fashion

with a healthy degree of enthusiasm, reflecting the attitude of a newly appointed general surgical consultant. Surprisingly, you do not get distracted by the noise level in the viva hall, which gets masked when you are paying attention. There are six questions in each of the four stations. For example, if you achieve a mark of 8 (maximum) in 2 questions, a 6 (pass) in 2 questions and a 4 (fail) in 2 questions then overall you will still go on to pass that station. So if you feel that you have not performed well in one station, remain focused and give the rest your best shot. Remember the pass mark is calculated over the entire two days. Marks are also awarded for performance under stress (See 'Marking Descriptors' available online at www.jcie.org.uk).

It is important to have an opinion on key issues and controversies in your subspecialty but be mindful – the examiner may be a key player in that particular topic! Guidelines (for example, NICE), position statements from respective associations (ASGBI, ACPGBI, BEATS, ABS, AUGIS) and landmark trials are helpful to know and throw into the conversation as this may direct the viva down a route which you are confident in. Equally, try to steer away from areas that you are not so familiar with. You can be the navigator of your exam questions!

During the clinicals, dress smartly, bare below the elbows, and be seen to use the alcohol gel before and after patient contact. Be respectful, courteous and establish an early rapport with the patients, being sensitive to their reactions to your line of questioning or clinical examination. First and foremost, demonstrate to the examiners that you are a safe surgeon. Keep it simple and follow the principles you would in day-to-day practice. The results will arrive via email within two weeks.

CONCLUSION

The Intercollegiate Specialty Examination in General Surgery (FRCS) is a fair examination. With focused energy and good forward planning, success is definitely achievable.

References

1. The primary FRCS examination – a fresh look. *Br Med J* 1969; **1(5,642):** 502.
2. Joint Committee on Intercollegiate Examinations. *FRCS (Specialty) Examinations Section 1 Results from 2009.* http://jcie.org.uk [last accessed June 2016].
3. The Intercollegiate Surgical Curriculum. *Educating surgeons of the future.* General Surgery. http://iscp.ac.uk/documents/syllabus_GS-2013 [last accessed June 2016].