Regulations and Syllabus relating to Fellowship Examination In Urology

FCSurol(ECSA)

2016 edition
1. Introduction

The College of Surgeons of East Central and Southern Africa awards Membership (MCS(ECSA)) and Fellowship (FCS(ECSA)) qualifications. Approved trainee surgeons shall be trained in the hospitals of the region with guidance and support provided by the College.

The Fellowship examination in Urology leads to the qualification of Fellow of the College of Surgeons of East, Central and Southern Africa, FCSurol(ECSA). This fellowship is recognition that the candidate has reached the level of knowledge, understanding and practice of surgery sufficient to practice independently at a consultant or specialist level. It should be recognised, however, that surgery is not a static art and fellows should continue to increase knowledge and skills by means of research, conferences, meetings and reading.

The information given in this document is intended as a guide to persons sitting the College examinations and shall not be deemed to constitute a contract or the terms thereof between the College and a candidate or any third party, or representations concerning same.
The College is not responsible and shall not be bound by errors in, or omissions from these regulations; the College reserves the right to revise, amend alter or delete academic regulations at any time by giving such notice as may be determined by COSECSA Council in relation to such changes.

2. Registration as a Trainee

Applications to register as a trainee must be made online on the COSECSA website. In order to register you will need an electronic copy of your primary medical qualification, your medical council (or equivalent) registration, a passport-style photo, and, if applicable, copies of any other surgical qualifications you may have. Applications will only be accepted online. Applications will be assessed by COSECSA, and if found suitable, applicants will be accepted to the training programme provisional upon payment of the programme entry fee.

The programme entry fee can be paid online, by bank transfer to the COSECSA Secretariat bank account in Arusha, Tanzania or to the COSECSA Country Representative. Please see the COSECSA website for details of all fees.

On receipt of the registration fee, the Secretariat will send the candidate:

- Personal login details, which will allow access to the COSECSA Electronic Logbook and e-learning platform (School for Surgeons)
- Assessment forms to be filled in at the end of every training post by the trainee and the supervising consultant.
- A registration number, which remains unique to the candidate.

3. Training Requirements

All requirements below will need to be fulfilled without exception.

3.1. Before being eligible to sit for the fellowship examination in urology, candidates will be required to be registered with the College (see Section 2 above).

3.2. Candidates must be registered in the FCS Urology training programme for at least three years before appearing in the FCSurol Examination. Registration by the end of February in a given year allows that year to count as a full year of training and will enable the candidate to sit the Clinical/Oral examination at the end of the following year.
3.3. Candidates for the fellowship examination in urology should normally have passed the membership examination of this College and possess the qualification MCS(ECSA).

3.4. Candidates will have to have spent three years in recognised supervised training posts after completing the requirements for MCS. Of these three years two must involve the regular treatment of elective and emergency urological conditions, one year may be spent in an elective unit not dealing with emergencies. Assessment forms for each training post should be filled in by trainee and trainer.

3.5. Of the three years, up to six months may be spent outside the region in a post that has been prospectively agreed with the COSECSA Examinations and Credentials Committee. This post may be in an elective unit.

3.6. Candidates are reminded that it is in their interest to experience a wide spectrum of surgical disciplines.

3.7. Exemption to the requirement of possessing the MCS(ECSA) qualification may be given to those who have passed an equivalent examination. In order to obtain an exemption, applicants must either:

• Have completed an MMed(Surgery) qualification in one of the constituent COSECSA countries or in a COSECSA accredited training centre outside the COSECSA region, and provide evidence of three years of specialty training in urology as described in section 3.4. For applicants completing a four year MMed(Surgery) programme the minimum further requirement is one year in a COSECSA accredited training programme. For candidates completing a four year MMed(Surgery) programme the minimum further requirement is two years in a COSECSA accredited training programme.

• Have completed FRCS, FCS(SA) or another similar specialist qualification and be working as a specialist in a COSECSA country. The basic surgical training examinations of other colleges and institutions may also be acceptable but each one will have to be reviewed by the Examination and Training Committee of the College before exemption can be given.

• Candidates who are granted exemptions will be required to register with COSECSA by the end of February in the year in which they intend to sit the examination.

3.8. Candidates will be required to complete at least 6 (out of a total of 10) FCS Urology cases on www.schoolforsurgeons.net in each year of their training.
4. Logbook

COSECSA is transitioning from the use of a paper-based logbook to an electronic logbook. FCSurol candidates for the examination in 2017 and in all subsequent years are required to use the COSECSA electronic logbook. Candidates for the 2016 examination may use the paper based logbook as used in previous years.

**Paper based Logbook (for candidates for the 2016 FCSurol examination)**

During the training period candidates must keep a logbook recording all of their training experience. The book should be available for inspection at any time by the Country Representatives. Consolidation sheets should be filled in every 6 months and a final consolidating sheet filled in to cover the whole training period. The logbook should also contain details of all courses attended and the trainee and post assessment forms for the whole training period.

More detail on completing logbooks is provided in the logbook itself.

Before submission to the examination the Country Representatives should check the logbook for completion, fill in and sign a checklist which remains at the front of the logbook.

At the August council meeting of each year, the Country Representatives will hand over to the Examinations and Credentials Committee Panel head, a copy of the checklist together with copies of the Training post assessment form, Trainee assessment form and the final consolidation sheet (up to August) of all the candidates taking the examination that year.

Before the start of the clinical and oral examinations, the logbook should be handed to the examination administration secretary. Proof of attendance at an approved Basic Surgical Skills course, Basic Surgical Science course and Critical Care or Trauma Course should be brought to the oral examination. Candidates will not be allowed to sit for the examination if this is not done.

**Electronic Logbook (for candidates for the 2017 FCSurol examination, and all subsequent examinations)**

Candidates are required to log all operations for the duration of their training period in the electronic logbook. In advance of the examinations, details from each candidate’s electronic logbook will be made available to their Country Representatives and the COSECSA Examinations and Credentials Committee. At the examinations details from each logbook will be provided to the relevant oral examiners. Only operative experience logged in the electronic logbook will be taken into account and candidates will not be allowed to sit for the examination if operative experience is not adequately recorded.
At the August council meeting of each year, the Country Representatives will hand over to the Examinations and Credentials Committee Panel head, a copy of the Training post assessment form and Trainee assessment form.

Before the start of the clinical and oral examinations, a print out of the electronic logbook operations list (signed by the trainee’s supervisor) and consolidation sheet should be handed to the examination administration secretary. Proof of attendance at an approved Basic Surgical Skills course, Basic Surgical Science course and Critical Care or Trauma Course should be brought to the oral examination.

5. Application to Sit Examinations

5.1. Candidates should submit the examination fee by the end of July in the year of their exam. Please see the COSECSA website for details of all fees. Examination fees can be paid online, by bank transfer to the COSECSA Secretariat bank account in Arusha, Tanzania or to the COSECSA Country Representative.

5.2. On receipt of the examination fee, candidates will be informed of the precise times, dates and places for the exams.

5.3. By applying to the examination a candidate agrees to be bound by the rules and regulations of the College.

5.4. If a candidate withdraws from an exam not less than 12 weeks before the exam is due, then the fee can be transferred to the next exam date. Fees will not normally be returned if the candidate withdraws permanently, unless due to special circumstances as determined by the College Council.

5.5. Candidates must pass the examination within four years of their first attempt. After this they will not be allowed to re-sit. A total of four attempts only will be allowed.

5.6. Candidates who pass the written examination but fail the oral and clinical examinations, may attempt the oral and clinical examinations for a maximum of two more years without having to rewrite the written examination, all within a period of four years in total.

6. Examination Format and Conduct

6.1. The standards of the examination will be set by the Examinations and Credentials Committee of the College, which will recommend to Council those standards required by both examiners and candidates. A panel of
examiners will be chosen by the Examinations and Credentials Committee from amongst Fellows of the College for each examination. A register of examiners will be kept by the chairman of the Examinations and Credentials Committee. An examination board will be constituted for each diet of examinations, comprising the chairman of the examination committee, two members from each examination panel and at least one external examiner who will be appointed by Council on recommendation of ECC. The role of the external examiner(s) is to:
  o Moderate the written question papers
  o Assist with the examination of candidates
  o Provide external independent assessment of the examination
  o Report on the conduct of the examination to the College Council.

6.2. The written FCSurol (ECSA) examination will be comprised of 2 papers. The first paper will consist of single best answer multiple-choice questions. The second paper will consist of extended matching and/or short answer questions and/or single best answer multiple-choice questions.

6.3. Candidates who pass the written examination will be invited by the Chair of the Examinations and Credentials Committee to the clinical and oral examination. Candidates who do not pass the MCQ section will not be invited to the clinical and oral examination.

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6.5. There will be two 30 minute orals. A clinical examination takes place at the same time and at the same site as the oral. This will be comprised of six 20 minute cases.

6.6. Candidates have to pass the written examination and the clinical and oral examination in order to pass overall. The written examination may be held in any of the countries of the region. In exceptional circumstances the examination committee may approve an examination site outside the region. The written examinations are held simultaneously on the first Wednesday of September, at a recognised examination centre with impartial invigilation. The COSECSA Country Representative shall be the Chief Examiner.

6.7. The examination papers will be set by members of the examination committee and independently moderated by an external examiner.

6.8. No details of marks will be issued to Country Representatives or candidates. Candidates should bring proof of identity. As discussed in Section 4, candidates using paper logbooks should bring these, and candidate using the COSECSA electronic logbook should bring signed printouts of these.
6.9. If a candidate fails their clinical examination then they may attempt the clinical examination for a maximum of 2 more years without having to rewrite the written examination.

6.10. The chairman of the examination panel will endeavour to minimise the chance of a candidate being examined by an examiner from their own training institution.

6.11. The panel of examiners will give the results to the Examination Board who will meet on the day of examination. The Board will then approve the results on behalf of Council and publish them.

6.12. For each candidate who fails the exam, the Board will allocate a Fellow of the College (usually a member of the panel of examiners) who will communicate with the candidate and offer advice as may be indicated. Details of marks will not be given.

6.13. Appeals against results must be made in writing to the Council within 60 days of the completion of the examination. The President of the College will then appoint an impartial Appeals Committee to investigate the appeal, and require a written report to be filed by the Chairmen of the panel of examiners and the Examination Board. The Appeals Committee will then take all considerations and its own findings into account and recommend a decision which will remain final and binding.

7. Syllabus

Outline Syllabus
The achievement of the FCSurol (ECSA) by examination denotes that the successful candidate is capable of holding the position of a consultant urological surgeon in the region, and of being accorded specialist status. He or she will not be expected to be a super-specialist in a particular branch of urology but will be expected to have the knowledge and competence of a good urology consultant. It is not possible in this small booklet to list all that the candidate is required to know, but the following is a guide to the scope of the examination

1. Anatomy:
   - Embryology of the Genito-urinary tract: Morphogenesis of the Germ layers, pronephros, mesonephros, development of the kidney, development of the ureter, development of the Cloaca, development of the trigone and bladder, development of the Urogenital Sinus and development of the ducts of the Genitalia.
   - Anatomy of the retro-peritoneum and adrenal: Musculoskeletal boundaries of retro-peritoneum, urinary organs, major arterial and venous vasculature of the retro-peritoneum, lymphatics, nerves and adrenal glands.
• Anatomy of the upper urinary tract: Renal anatomy, ureteral anatomy and anatomic relation of the kidneys, the ureters and their coverings.
• Anatomy of the lower urinary tract: The urinary bladder, the urethra, auxiliary genital glands in the male, the scrotum, the penis and the perineum.
• Anatomy of the pelvis: Pelvic cavity (bony pelvis), pelvic floor and pelvic fascia. Male internal genital organs and female genital organs. Pelvic vessels and nerves.

2. Physiology:
• Normal renal physiology: Renal hemodynamics, excretion of organic solutes and endocrine function of the kidney.
• Physiology of the renal pelvis and ureter: Electrical activity, contractile activity, mechanical properties, propulsion of urinary bolus, physiology of the uretero-pelvic junction and physiology of the uretero-vesical junction.
• Physiology of the urinary bladder: Neuro-physiology of the urinary bladder, urodynamics and description of normal voiding.
• Physiology of male reproduction: Hypothalamic-pituitary function, the testis, epididymis and ductus deferens physiology. The biochemistry and physiology of the prostate and seminal vesicles. Sex accessory gland secretions.

3. Pathology:
• Congenital anomalies of the genito-urinary tract: Polycystic kidneys, medullary sponge kidney and renal dysplasia. Anomalies of the kidney as number, ascent, form and fusion, rotation and vasculature. Anomalies of the ureter as number, structure, termination and position. Extrophy, epispadias and other anomalies of the urinary bladder.
• Infection and inflammation of the genito-urinary tract: Genito-urinary tuberculosis, urinary schistosomiasis, genital filariasis, sexual transmitted diseases and prostatitis.
• Tumours of the genito-urinary tract: Carcinoma of the kidney, ureter, urinary bladder, prostate, urethra, penis and testis.

4. The urologic examination and diagnostic techniques:
• Initial evaluation, including history, physical examination and urinalysis.
• Ultrasonography
• Computed tomography of the kidneys, computed tomography of the adrenal glands.
• Renal angiography
• Urodynamics
• Endoscopy

5. Infections and inflammation of the genito-urinary tract
• Infection and inflammation of the genito-urinary tract: introduction and general principles.
• Urinary tract infection in infant and children.
• Urinary tract infection in women.
• Prostatitis and related disorders.
• Urinary tract infection in spinal cord injury patients.
• Sexual transmitted diseases
• Cutaneous diseases of external genitalia.
• Parasitic diseases of the genito-urinary system.
• Fungal infection of the urinary tract.
• Genito-urinary tuberculosis.

6. The pathophysiology of urinary obstruction
• Hydronephrosis: role of lymphatic in hydronephrosis, compensatory renal growth, renal counterbalance, intrapelvic pressures, and different physiologic changes of unilateral and bilateral ureteral obstruction
• Extrinsic obstruction of the ureter: vascular lesions, benign condition of the female reproductive system, and retroperitoneal mass.
• Neuro-muscular dysfunction of the lower urinary tract: low-pressure reservoir function of the bladder, urethral responses to bladder filling, micturation, and clinical expression of neurogenic vesical dysfunction.

7. Urinary lithiasis
• Epidemiology of urolithiasis
• Theoretical basis of etiology of urinary lithiasis.
• Initial diagnosis of urinary lithiasis.
• Evaluation and treatment of specific types of medically active urolithiasis.
• Urinary lithiasis of children.
• Role of surgery in the treatment of urinary calculi

8. Genito-urinary trauma
• Renal trauma.
• Ureteral trauma.
• Bladder trauma.
• Urethral trauma.
• Injuries of the external genitalia.
• Injuries to the scrotum and testis.
• Thermal, chemical and electrical injury to the genitilia.

9. Benign prostatic hyperplasia
• Incidence, pathology, etiology, diagnosis, and differential diagnosis.
• Minimally invasive treatment of benign prostatic hyperplasia: High intensity focused ultrasound, laser therapy, transurethral balloon dilation of the prostate, hyperthermia and thermotherapy, transurethral electrovaporization, and transurethral needle ablation of the prostate.
• Transurethral resection of the prostatic adenoma.
• Retropubic and suprapubic prostatectomy.

10. Tumours of the genito-urinary tract
• Principles of oncology
• Renal tumours.
• Transitional cell cancer of the urinary tract.
• Benign and malignant tumours of the male and female urethra.
• Carcinoma of the prostate.
• Neoplasms of the testis.
• Neoplasms of the penis.

11. Paediatric urology
• Management of the extrophy-epispadias complex and urachal anomalies.
• Imperforate anus, persistent cloaca, and urogenital sinus outlet obstruction.
• Management of intersexuality.
• Congenital anomalies of the testis.
• Hypospadias.
• Disorders of the urethra and penis.
• Vesicoureteral reflux, megaureter, and ureteral reimplantation.
• Ectopic ureter and ureterocele.
• Prune-Belly syndrome.
• Enuresis.
• Myelomeningocele.
• Neonatal and perinatal emergencies.
• Paediatric oncology.

12. Infertility
• Evaluation of the infertile male.
• Classification and etiology of disorders associated with male infertility.
• Medical management of testicular dysfunction.
• Surgical management of male infertility.

13. Sexual function and dysfunction
• Penile erection
• Ejaculation
• Erectile dysfunction.

14. Urologic surgery
• Perioperative care.
• Surgery of the kidney.
• Surgery for calculus disease of the urinary tract.
• Renal transplantation.
• Surgery of the ureter.
• Open bladder surgery.
• Treatment of male urinary incontinence.
• Treatment of female urinary incontinence.
• Urinary fistulae in the female.
• Suprapubic and retropubic prostatectomy.
• Radical prostatectomy.
• Endourology
• Surgery of the seminal vesicles.
• Surgery of the urethra.
• Surgery of the penis.
• Surgery of the scrotum and its contents.
15. Other Surgical Disciplines
Candidates for all FCS(ECSA) fellowships will be expected to have detailed specialist knowledge in their own field, but will also be able to have reasonable competence in dealing with emergencies in other disciplines. In particular they will be expected to be able to deal with:

- Head injuries
- Chest injuries
- Spine injuries
- Limb injuries
- Acute abdominal emergencies
- Caesarian section

Candidates will be expected to be able to perform endotracheal intubation and perform simple general anaesthesia using intravenous or inhalational agent. They will also be expected to be able to use local anaesthesia safely and perform regional and spinal blocks.