

Anaesthesia South London

Advanced Training Modules
Handbook

S⁺ GEORGE'S
SCHOOL OF ANAESTHESIA



SESA

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Guy's Airway Advanced Training Module

Module Supervisor: Dr Imran Ahmad
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Background

- Guy's Hospital Site, Guy's and St Thomas' NHS Foundation Trust
- Number of fellows - 2
- Timetables: 3 airway lists on Mon/Tues/Weds (Th 1,2 & 3) • 2 airway lists on Thurs (Th 2 & 3) Occasionally you may be assigned to a dental list and day surgery ENT lists.

Most work will be in Ear Nose & Throat and Maxillofacial surgery – oral, pharyngeal and laryngeal surgery, neck surgery including thyroid and mediastinal work and facial surgery. Both specialities include complex cases often combined with plastic surgery.

Clinical Aims

By the end of your fellowship, you should aim to achieve and be competent in all of the following:

- Fiberoptic intubations - aim for around 20-30 AFOI over the 6 months
- Use of videolaryngoscopes (Airtraq, APA, CMAC, Kingvision, Glidescope)
- Intubation through SGA's
- Cricothyroid puncture, fine bore and wide bore cannulae
- Surgical airway techniques, including performing a surgical tracheostomy
- High Frequency jet ventilation, with the Monsoon ventilator and Manujet
- Management of supraglottic & subglottic lesions
- Cleaning, scope care and traceability
- Difficult airway guidelines
- Extubation strategy in patients with anticipated difficult airways
- Running an airway list and communication with surgical colleagues
- Complete a free flap case, transfer and handover to GCCU

Academic and Management Aims

- You are expected to produce written work to be submitted to scientific meetings and/or publication to peer-reviewed journals during your post
- You should book study leave to attend some of the following meetings:
 - Difficult Airway Society (DAS) Annual Scientific Meeting (November)
 - An advanced Airway Skills Course
 - SETSA meeting
 - AAGBI Scientific Meeting
 - Head & Neck Anaesthetists (HANA) meetings
 - ENT/Laryngology meetings (to present joint Anaesthetic/ENT work)

- International meetings such as ESA, ASA, NWAC, WACAim

Teaching Aims

You are expected to arrange/participate in the following:

- Joint ENT OP clinic on Fridays
- Attend the good clinical practice half day course run by the Joint Clinical trials office at KHP, <http://www.jcto.co.uk/NonCommercial/trainingEvents.html>
- Attend a well-recognised difficult airway course as faculty (Guy's/Kings/Oxford/Coventry/RCOA/DAS/NWAC/AAGBI)
- Participate in joint Anaesthesia/ENT simulation training.
- Participation in theatre airway teaching to all staff
- Medical student airway teaching with Dr Dua

Testimonials and Accomplishments

We routinely aim to submit abstracts and present at most of the following meetings:

- AAGBI, summer and winter scientific meeting
- RCOA Scientific Meeting
- DAS ASM
- ESA
- NWAC
- EPBOM ASM
- SESA meetings
- GAT
- HANA
- Various ENT/Head & Neck Cancer meetings
- Over the past few years we have won numerous prizes various at meetings for our presentations and would like to continue these achievements.

Summary

At the end of the advanced airway module you will be expected to have completed all the following:

- Achieved the target number of FOI and be competent in performing an AFOI
- Achieved skills in other advanced airway techniques
- Attended ENT clinics and perform >20 nasendoscopies
- Attended good clinical practice course
- Attended at least one advanced airway course as faculty
- Attended and present in at least one national/international meeting +/- publication (on average airway fellows achieve 4-5 presentations)
- Participate in airway projects
- Aim for at least one publication per six months

Liver Transplant and Hepatobiliary Surgery

Module Supervisor: Anneliese Rigby
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King's has one of the busiest liver transplant units in the UK with some of the best results in Europe. We carry out around 220 adult and paediatric liver transplants a year, this includes a number of liver plus kidney and multi-visceral transplants.

Acute Liver Failure (ALF) – KCH is world renowned for expertise in the management of this rare and devastating condition. More patients with ALF are referred and treated here than in any other centre in the western world.

Approximately 50% of the annual caseload of 1000 patients admitted to LITU are admitted with complications of chronic liver disease, there is also a dedicated tertiary referral, endoscopy service carrying out complex ERCP and EUS.

Background

- King's College Hospital, Denmark Hill
- 4 college approved, training posts of 6 months each. 1 non-training liver/cardiac post – usually filled by post CCT or overseas candidate
- Key individuals:
 - Dr Paul Bras – clinical lead
 - Dr Simon Cottam – CD
 - Dr John Sedgwick – risk and governance lead
 - Dr Charl Jooste
 - Dr Chris Nicholson – transplant pre-assessment
 - Dr Zoka Milan – research interest
 - Dr Rob Broomhead – educational supervisor, research interest
 - Dr Anneliese Rigby – transplant pre-assessment
 - Dr Anish Gupta – research interest
- 3 liver theatres (1 transplant and 2 hepatobiliary) with a dedicated SSDU (4 level 2 beds), and Liver ICU (15 level 3 beds)
- Non-resident on call, consultant always attending with you for transplants and complications from previous transplant
- No requirement to live close to King's as co-ordinators can let you know well in advance of transplant start time

Clinical Aims

- Involvement in 20-25 liver transplants
- Involvement in pre-assessment for transplants, whipples procedures and hepatectomies, including CPEX, Echo, Angio, DSE and PFT analysis
- Will be allocated on rotational basis to cover transplant or HPB theatres

- Clinical skills – Central access, PiCCO, arterial lines, thoracic epidurals, thromboelastometry, cardiac output monitoring
- Management of massive blood loss and coagulopathy
- Management of complex physiology during major surgery

Academic and Management Aims

- Expected to participate in departmental research and audit projects both in transplant and HPB
- Attendance and participation in weekly transplant listing meeting, paediatric listing meeting, daily post transplant progress, HPB radiology meeting, M&M meetings
- Department regularly submit to ILTS, LiCAGE and ESOT and team often present lectures and these and other general meetings

Teaching Aims

- Faculty members for the delivery of the KLARA course
- Organised teaching sessions in transplant reviewing journal articles
- Encouraged to participate in and assist with HPB / liver simulation teaching

Obstetric Anaesthesia King's College Hospital

Module Supervisor: Chris Nicholson

Background

- King's College Hospital NHS Foundation Trust
- Clinical and research fellow post. This post is intended for Specialist Registrars in Anaesthesia who are in the fifth year of their training and wish to gain further experience in this subspecialty.
- Lead Clinician: Ian Fleming. Educational Supervisors: Vanessa Skelton and Nicholas Parry
- You will work as an SpR in Anaesthesia attached to the Obstetric Unit and with opportunities to visit the Foetal Medicine (Harris Birthright) Unit.
- There are currently approximately 5400 deliveries on the labour ward per year, many of which have mothers or babies at high risk of complications. The Harris Birthright Unit (Director: Professor K Nicolaidis) is a tertiary referral centre for foetal abnormalities.

Clinical Aims

- Providing anaesthesia and analgesia for labour and operative deliveries under the supervision of a Consultant Obstetric Anaesthetist
- Pre-operative assessment and post-operative follow up of all such patients
- Attendance at the Obstetric Anaesthesia Pre-assessment Clinic for women with medical problems
- Assessment of women at high risk with management plans for their deliveries
- Participation in the Specialist Registrar on-call rota on a shift basis
- Management of pregnant women with medical problems related to pregnancy
- Management of pregnant women with foetal abnormalities and foetal loss
- Maternal Resuscitation
- Involvement in the pre-assessment of high risk parturients prior to delivery
- Involvement in the outpatient management of women with medical conditions incidental to pregnancy
- Detailed understanding of anatomy, physiology, biochemistry and pharmacology relating to pregnancy

Academic and Management Aims

- Participation in the Departmental Audit (monthly)
- Attendance at the weekly perinatal meetings, monthly risk management meetings and monthly labour ward forum
- Participation in clinical research in collaboration with the obstetric department
- Participation in Audit and use of the computerised anaesthetic audit system

- Insight into the management aspects of anaesthetists on the labour ward and close working with other disciplines
- Participate in on-going research (as appropriate)
- Write and submit a protocol for a research study (as appropriate)
- Design and carry out an Audit project and present it at one of the monthly Departmental Audit meetings

Teaching Aims

- Supervision and induction of SHO's attached to the obstetric unit
- Organise and participate in teaching of topics relevant to pre- and post-fellowship anaesthetic trainees within the department
- One to one teaching of anaesthetic SHO's on modular obstetric anaesthesia training
- Education of midwives in analgesic techniques
- Education of pregnant women in antenatal classes
- Recommended courses:
 - OAA 3-Day Course in Obstetric Anaesthesia and Analgesia (held every November)
 - MOET Course (held at King's twice yearly)
 - King's Difficult Airway Course (held at King's twice yearly)

Obstetric Anaesthesia Tunbridge Wells

Module Supervisor: Helen Burdett
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Background

- Maidstone and Tunbridge Wells NHS Trust – Tunbridge Wells Hospital, Penbury
- One full-time post suitable for ST7 onwards

Sample Weekly Rota (This will vary from week to week)

	Monday	Tuesday	Wednesday	Thursday	Friday
0800-1330	Elective LSCS	Elective LSCS	High Risk Obs Anaesthetic Clinic	Elective LSCS	Elective LSCS
1330-1800	Labour Ward	Labour Ward	Labour Ward/ Multidisciplinary Risk Meeting 1400-1500	Labour Ward	Labour Ward

- Tunbridge Wells Hospital maternity unit has well over 5500 deliveries per year. A significant number of pregnant women are presenting with increasingly complex medical disorders. Elective caesarean sections are carried out 5 days a week. There are 18 bed single rooms on the Labour Ward & 2 High Dependency Unit rooms. The LSCS rate is 26%. 95% of Elective LSCSs are performed under regional anaesthesia and 80% of emergency LSCSs. A 24-hour mobile epidural service is provided by a dedicated anaesthetist.
- You are expected to be a member of the Obstetric Anaesthetists' Association

Clinical Aims

- Additional experience in regional and general anaesthetic techniques for labour and delivery.
- Management of high-risk obstetric cases.
- Maternal resuscitation and High Dependency Care
- Neonatal resuscitation and CTG/fetal blood gas analysis
- Communicate effectively with women and their partners:
 - Effectively explain anaesthesia choices to high-risk patients and address risks/benefits of the choices.

- Communicate effectively with the midwives and obstetricians particularly in high risk and emergency situations.
- Maintain effective written documentation as required.
- Antenatal assessment of mothers, including reviewing patients at the weekly High Risk Obstetric Clinic
- Attend mandatory morning ward rounds on labour ward
- Post-partum follow up
- Participate in a 1:8 on call commitment for Labour Ward
- Gain sufficient experience to independently manage complex obstetric cases

Academic and Management Aims

- Designing and writing a research or audit project. Work is currently being undertaken on enhanced recovery for elective LSCS and increasing ambulation in labour.
- Attendance and involvement in following managerial meetings:
 - Labour Ward Forum
 - Clinical Risk Management Meetings
 - Obstetric Theatre Meetings
 - HDU training meetings
- Recommended courses:
 - Ai OAA 3 Day Course in Obstetric Anaesthesia and Analgesia (Nov) or OAA Annual
 - Scientific Meeting (May)
 - Obstetric Medicine Course. Royal College of Physicians. (Oct/Nov)
 - MOET course
 - Simulation Instructor Training
 - Neonatal Resuscitation Course
- You should read:
 - The International Journal Of Obstetric Anaesthesia
- You will be expected to seek out articles on obstetrics or obstetric anaesthesia in e.g. the BJA, Anaesthesia, A&A, Anaesthesiology and the BJOG

Teaching Aims

- Extensive opportunities for teaching.
- Teach and train junior anaesthetists
- The post-holder will also take the lead for the MDT Obstetric Simulation, which is open to Anaesthetists, Obstetricians and midwives.
- Teach on PROMPT

Advanced Pain Training

Module Supervisor: Dr Richard Griffiths

The post will be based at the Chronic Pain Unit, Maidstone hospital, which is part of Maidstone and Tunbridge Wells NHS Trust. It is a stand-alone pain unit with its own ward, theatre and rooms. The pain service is lead by 4 anaesthetic consultants who oversee provision for the population of West Kent (approx. 500000 people) including the regional cancer pain service.

Overview: The trainee will attend clinical sessions in chronic, cancer and acute pain. These will all be delivered by consultants or associate specialists with extensive experience in pain management. Trainees will attend clinics and to observe, engage and eventually lead according to proficiency

Background

- Maidstone and Tunbridge Wells NHS Trust
- One full-time post lasting 6 months of the 7 year training programme
- Applicants must have and MB ChB or recognised equivalent and FRCA or recognised equivalent

Provisional timetable

	AM	PM
Monday	Intervention list	Clinic
Tuesday	Clinic	Cancer Pain
Wednesday	Intervention List	Hospice
Thursday	Intervention list	Clinic/Acute Pain
Friday	Intervention list	Teaching / personal study

- The post has an on-call commitment at Tunbridge Wells Hospital (covering theatres and ITU) It has a 1:8 rota. On-call duties commence from 1800 to maximise training time.
- Regional Advisor Dr Richard Griffiths, College Tutor Dr Helen Burdett, Educational Supervisor Dr James Wilson

Clinical Aims

- Chronic (non-malignant) Pain Clinics – attend, observe and lead clinics whilst being supervised directly and indirectly according to proficiency
- Attend session with acupuncture service providers (specialist nurses, physiotherapists, GPwSI)
- Guaranteed time to attend pain psychologists/pain management programme at Medway or Eastbourne hospitals
- Trainee encouraged to attend departments that perform complex interventions not provided at Pembury e.g. cordotomy at Portsmouth

Hospitals, and other speciality departments within trust e.g. rheumatology clinics

- **Cancer pain:** The chronic pain unit at Maidstone provides a consultant led cancer pain service. Dedicated consultant sessions provide a liaison pain service to the regional cancer pain centre at Maidstone hospital and to three local hospices. Cancer pain interventions (including neurolysis) and catheter techniques are performed at the hospice and at the Pain unit
- **Palliative care links** are excellent and the trainee will be encouraged to attend weekly ward rounds at the local hospices led by palliative care physicians. There are ward referrals at Maidstone and Tunbridge Wells NHS Trust and close relationships with the oncology teams.
- **Acute Pain:** There is a comprehensive consultant-led acute pain service at both Maidstone and Pembury hospitals providing evidence-based pain management for the post-operative and in-patients. The trainee will have regular timetabled acute pain sessions. There are weekly team meetings and time for case-discussions and teaching. There is a formal teaching for anaesthetic trainees at TW and Maidstone hospitals. There is a session for self-directed learning.

Academic and Management Aims

- There will be opportunities to attend unit meetings and service development meetings with the PCT where available. This should provide useful experience of the realities of medical management.
- The unit is actively involved in ongoing audit and clinical research with recent publications in the medical literature and international presentations. The trainee will be expected to undertake research and audit projects during their attachment. There is opportunity within the weekly timetable to allow this.

Suggested Reading List

- Key topics in Chronic Pain – Grady and Severn. Core Curriculum for Professional Education in Pain - IASP Press.
- Refresher Course Syllabus – IASP Press.
- Pain medicine Manual – Dolin and Padfield
- Practical Pain Management – Raj
- Clinical Pain Management 2002, Arnold –Rice, Warfield, Justins; Eccleston. Pain – Melzack and Wall
- Pain: The Science of Suffering - Patrick Wall
- Interventional Pain Management – S.Waldman
- A Guide to Symptom Relief in Advanced Disease – Regnard and Tempest
- ABC of Palliative Care – BMJ Publications

Regional Anaesthesia Advanced Training GSTT

Module Supervisor: Amit Pawa

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Background

- Guy's and St Thomas' NHS Foundation Trust
- 2 Fellows per 6 month rotation
- As far as possible, fellows will be placed on "regional anaesthesia lists" and will be supernumerary initially
- Specific resources:
 - Anatomy lab and access to dissection lab for prosected specimens
 - Simulation centre ultrasound phantoms via Dr James Barron
 - DIY phantoms
 - Ipad Apps
- Specialist societies recommended: ESRA, RA-UK, LSORA

Clinical Aims

- Initial supernumerary on "regional lists," however, as the advanced training proceeds, you will also be expected to run some lists independently to utilise your list management skills
- General on-call commitment comes with the post
- At the end of the 6 months you should have broad experience in regional anaesthesia, being able to undertake procedures without supervision and be confident in teaching these skills
- Practical modules
 - Upper limb Regional anaesthesia
 - Lower limb regional anaesthesia
 - Trunk/paravertebral blocks
 - Brachial plexus
 - Lumbosacral plexus
 - Chest and anterior wall
 - Spine
- It is expected that the Regional Anaesthesia Advanced trainees will understand and appreciate the common anatomical variations associated with neurovascular and musculoskeletal structures of the upper and lower extremities

Academic and Management Aims

- You should read books and journals independently and aim to be knowledgeable in:
 - Clinical and surface anatomy relevant to Regional Anaesthesia
 - Drugs and equipment used in regional anaesthesia
 - Physics related to use of ultrasound in regional anaesthesia

- Recent articles relating to new techniques/current trends in regional anaesthesia
- Current practice of ultrasound-guided regional anaesthesia
- Complete an audit linked to specialist area – many on-going audits and quality improvement projects ready to go with the consultants involved in Regional Anaesthesia
- Opportunities for oral and poster presentations at ESRA annual conference
- Personal study should be used to:
 - Draw up, disseminate and implement guidelines within the trust
 - Construct an e-folder of written and published material appropriate to the module
 - Devise and maintain procedures for equipment for RA within the trust
- In the six months of advanced training, ideally, you should aim to have at least submitted an abstract for poster or oral presentation, and ideally to have submitted a letter for publication within the correspondence section of one of the major journals
- Suggest trainees write a 3000 word review article on a topic of your choice that would be suitable for submission for publication
- Opportunities for further post-graduate Qualifications – ESRA diploma in regional anaesthesia, Masters in Regional anaesthesia

Teaching Aims

- You should use your study leave entitlement for national and international meetings devoted to regional anaesthesia and ultrasound
- Opportunities to support various Regional Anaesthesia courses around the country as faculty
- Informal teaching other trainees/consultants
- Teach and help coordinate monthly “sono-club”
- Assist in creation/development of on-line tutorial resource

Regional Anaesthesia – Medway Maritime Hospital

Module Supervisor: Sri Vishnabala
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Background

- Medway Maritime Hospital, Gillingham
- Majority of work days are protected teaching on a list suitable for regional anaesthesia (e.g. shoulder or breast), on call work is 2nd on call for CEPOD or Obs.

Clinical Aims

- Develop practical skills in regional anaesthesia with specific focus on:
 - Major orthopaedics
 - Breast
 - General surgery
 - Trauma

Academic and Management Aims

- Lead Quality Improvement Project
- Carry out relevant audit of Regional Anaesthetic Practice
- Develop evidence based guidelines for Regional Anaesthesia
- Encouraged to present work nationally and internationally

Teaching Aims

- Support faculty for LSORA
- Help organise the Core Trainees RA study day for KSS,
- Help with tutorials and support of trainees learning RA.
- Simulation course on RA emergencies and lots of opportunity to act as faculty

Testimonials and Accomplishments

- “Really enjoyed and appreciated this job. I would say it is about developing practical RA for the real world and a DGH rather than just doing blocks a specific way because that's how it is done in a teaching hospital. Excellent opportunity and encouragement to present work nationally and internationally. (ESRA and RA UK accepted everything I sent them - the breast RA actually won a prize!). Importantly you get the chance to work independently and work out what works for you. Some other very interesting things go on in the department, notably CPET and pre-habilitation. Really good place, people and department! it is a flexible and open sort of a job”

Thoracic Anaesthesia Advanced Training Module GSTT

Module Supervisor: Dr Cheng Ong
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Background

- Guy's and St Thomas NHS Foundation Trust
- Thoracic (pulmonary) surgery is performed at Guy's Hospital, one of the largest of 35 thoracic units in the UK, performing 1550 procedures per year.

Clinical Aims

- Develop skills and experience in:
 - One-lung ventilation and managing hypoxaemia,
 - Anaesthesia for rigid bronchoscopy, high-pressure source ventilation techniques,
 - Difficult airway management
 - Analgesia for thoracic surgery
- Thoracic procedures performed include:
 - Lung resection for cancer – lobectomies (350 per year), pneumonectomies, tracheobronchial resection
 - Rigid bronchoscopy – combined radiological tracheobronchial stenting; cryotherapy; diagnostic
 - Pleural disease surgery – pneumothorax treatment, mesothelioma, infective disease
 - Video-assisted thoracoscopies (600 per year) – for lobectomies, pleural disease treatment, bullectomy

Academic and Management Aims

- Fellow is expected to:
 - Actively participate in on-going thoracic anaesthesia projects
 - Initiate and submit written work to meetings and/or peer-reviewed journals within their post

Teaching Aims

- Teach in the multi-faculty Thoracic Simulation Course at the Simulation and Interactive Learning Centre (Sall)

Testimonials and Accomplishments

2012 An audit of airway management and adverse outcome in thoracic surgery

- Shapter S, Bennett J, Ong C.
Presented as an oral presentation SETSA Guy's Hospital April 2012; poster at the Royal College of Anaesthetists Annual Congress, Institute of Engineering and Technology London 3rd-4th May 2012; poster at the Association of Cardiothoracic Anaesthetists Nov 2012; poster presentation Difficult Airway Society Nov 2012.
- 2012 **An analysis of the cost of maintenance, repair and replacement of flexible optical scopes in a teaching hospital: scope for improvement?**
Friis J, Bareisiene D, Reid S, Ong C and Ahmad I.
- 2010 **GSTT Trust Guidelines on Paravertebral Block for Open Thoracotomy Analgesia**
Submitted to Clinical Governance Steering Group
- 2009 **Paravertebral catheters – a user experience (including National UK Survey of Analgesia for Lateral Thoracotomy)**
Lecturer at Association of Anaesthetists of Great Britain and Ireland (AAGBI) Annual Update on Thoracic Anaesthesia 28th April
- 2009 **Pain Management in Thoracotomy Surgery and Efficacy of Paravertebral Block**
Brislane K, Ong C.
Presented at Guy's and St Thomas' Clinical Governance Meeting
- 2009 **National Survey of Analgesia for Lateral Thoracotomy**
Mathew G, Ong C, Pearce A.
Poster presentation, Association of Cardiothoracic Anaesthetists (ACTA), Harrogate 2008; Joint Thoracic and Anaesthesia CG Meeting March 2009
- 2008 **Using the Bonfils Fibrescope with the Double-Lumen Tracheal Tube.** Barron J., Prater B., Ong C.
First Prize Trainee Presentation by Dr. Brian Prater, South East Thames Society of Anaesthetists (SETSA), 18th April 2008

Vascular Anaesthesia/Peri-operative Medicine

Module Supervisor: Dan Taylor
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We are now working closely with the peri-operative physicians to assess and plan for the care of this very high-risk group of patients. The candidate will gain insight into the pre-assessment process and learn more about peri-operative care of these patients outside of the operating theatre. This is a role into which anaesthetists of the future may be asked to expand and we see this as an excellent opportunity for trainees to broaden the skills they have to offer at consultant level. We offer the unique opportunity to follow the patient through the complete process and see the impact of assessment and planning on outcomes.

Our aim is to give you the skills and the cv to gain the job you want in the competitive market. We think that as well as generic skills in anaesthetising high risk patients we can give you access to the expanding field of peri-operative medicine which will increase your employability.

Background

- Guy's and St Thomas's Hospital
- In a 4 week period any 2 weeks is largely composed of on-call commitment in our current timetable (on call will be on the 0153 senior ST6/7 rota at STH). This 2 week timetable thus constitutes a 4 week period of training activity.
- POPS = peri-op medicine. Open surgery is 'Theatre 5'. 'Endo' is endovascular suite.

	Mon	Tues	Wed	Thurs	Fri
Week 1: am	Theatre 5	Endo	Endo (POPS mdm)	Theatre 5	Theatre 5
Week 1: pm	POPs clinic	Endo	Endo	Theatre 5	Theatre 5
Week 2: am	Endo	Theatre 5	Theatre 5	Endo	Endo
Week 2: pm	Endo	Theatre 5	Theatre 5	Endo (POPS WR)	Endo

- A minimum of 3 lists/week will be consultant supervised.

Clinical Aims

- Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex vascular procedures [including intra-thoracic], both elective and emergency and in-theatre and in imaging suites

- Gain mastery in the management of such major cases demonstrating the necessary multi-disciplinary leadership, communication and team-working skills necessary to ensure the care delivered benefits both the patient and the organisation
- Gain maturity in understanding the importance of utilising the time allocated to clinical sessions effectively, optimising throughput whilst not compromising patient safety
- To be capable of undertaking the perioperative anaesthetic care for a wide variety of complex vascular cases independently; this implies an ability to:
 - Provide perioperative anaesthetic care to a wide range of cases in and out of theatre [including those where supra renal or thoracic aortic cross clamping occurs], demonstrating a fundamental understanding of the problems encountered
 - Show the decision making and organizational skills required of an anaesthetist to manage busy clinical sessions that involve patients having major vascular procedures, ensuring that the care delivered is safe and timely, benefiting both the patient and the organisation
 - To assist colleagues in decisions about the suitability of surgery in difficult situations

In addition trainees may learn about:

- Cardiac output monitoring- Transoesophageal Doppler, LidCO and some TOE.
- Placement of spinal drains
- Management of major haemorrhage
- Application and interpretation of peri-operative investigations including stress echo, myocardial perfusion scanning and cpex
- Pre/peri/post op optimisation of the high risk surgical patient
- Counselling and consenting the high risk surgical patient

Academic and Management Aims

- Gains the necessary maturity to guide the choice of audit cycles in developing practice
- Becomes familiar with recent developments in perioperative anaesthetic care to this area of practice, to evaluate these developments and to advise colleagues of useful changes in practice
- We would encourage membership of the Vascular Anaesthesia society (VASGBI) who support training and audit and have regular meetings relevant to the specialty.
- Attendance at the Annual meeting of the Vascular Anaesthesia society (VASGBI) would be a recommended part of training and additionally external cpd looking at peri-op care and outcomes e.g. Evidence based peri-op medicine (EPBOM).
- Before starting post ideally we will agree one audit, one service evaluation project and one research project for the trainee to become involved with.

These will be drawn from our database of ongoing projects unless the trainee has any specific interests they wish to pursue.

- Projects should as a minimum result in poster presentation at a national or international meeting.
- We are happy to support trainees wishing to write review articles on topics on interest.
- Opportunities for involvement in service improvement projects and guideline writing can be provided to improve your portfolio in readiness for consultant jobs.

Teaching Aims

- Provide teaching to less experienced colleagues of all grades
- Several postgraduate diplomas exist in peri-operative medicine (e.g. in UCL, Brighton and Guildford) and we would happily support you in these if you wished to pursue them.

Airway Advanced Module SGH

Module Supervisor: Dr Karen Light

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Background

- St George's Hospital
- This post is designed to expose the trainee to a wide variety of advanced airway techniques. The post will usually be of 6 months duration (but may be longer for less than full time Airway trainees). The trainee will carry out regular clinical sessions on designated ENT and maxillofacial lists as well as on Trauma lists and Emergency lists to ensure confidence in emergency airway management. Exposure to thoracic lists to gain experience in double lumen tube insertion/anaesthesia for rigid bronchoscopy may also be possible.
- A programme exists to allow trainees/fellows to attend Consultant led ENT clinics to learn Flexible Nasendoscopy skills in the non-theatre setting. Trainees will also be encouraged to attend preoperative assessment clinics to gain experience in all aspects of care for a head and neck patient.
- Provision of a week long placement/observership at another airway centre may be available to Advanced Trainees.

Clinical Aims

- Ability to pre-assess complex Airway cases and autonomously formulate a safe anaesthetic plan including specialist airway management plans.
- Run airway list ensuring communication with surgical colleagues.
- Competence with a range of videolaryngoscopes.
- Competence with intubation via SGA.
- Competence with Bonfils intubating scope.
- Competence in fibre optic intubation, including solo awake fibre optic intubation utilising varied topicalisation techniques (+sedation techniques)
- Competence with use of THRIVE.
- Exposure to techniques for tubeless field anaesthesia, and for HFJV techniques.
- Exposure to technique of sub-mental intubation.
- Exposure for specialist extubation techniques including exchange catheter use.
- Exposure and understanding of requirements for Airway cases requiring free flap surgery.
- Exposure to cricothyroid puncture and familiarity with surgical front of neck access techniques.
- Exposure to anaesthesia for paediatric airway cases including emergency cases.
- Competence in Flex-nasendoscopy in ENT clinic setting.

Academic and Management Aims

- Advanced Airway Trainees must initiate, conduct and **complete** an airway related audit or QI project during their placement, which should be presented at both local and National level (minimum 1, but usually more).
- The majority of trainees will have >1 abstract/s accepted at scientific meetings, including, DAS, AAGBI, GAT, HANA etc. All projects should be discussed with Dr Light or Dr Mir (Airway Research Lead).
- There will be opportunities to participate in any on-going research projects if interested although this is not compulsory and may involve continuation of a project already underway.

Teaching Aims

- Planning and delivery of ODP/nurse airway training sessions (minimum 1 session)
- Presentation at departmental meeting –ideally M+M meeting (minimum 1)
- Faculty on Regional or National Airway Course (courses run at SGH or as external course faculty)
- Faculty for anaesthetist in-house airway skills courses (including Surgical Airway refresher, Simulation Airway training etc)
- Generate a minimum of one case report with accompanying literature search to be submitted to ‘shared’ folder to facilitate collaborative learning (this will also encourage preparation of case reports for wider publication/presentation).

Testimonials and Accomplishments

- “I came here in my last six months of training wanting to be comfortable dealing with whatever airway challenges came my way. I used to shy away from AFOIs, now I embrace the technique and have many other options that I would feel comfortable using should the situation dictate. Although six months modules cannot make you an expert by their completion, the George’s training has certainly given me the tools and confidence with which to become one as I embark upon my consultant career. Would I recommend it? Yes”

Advanced Cardiothoracic Module

Module Supervisor: Dr Agnieszka Crerar-Gilbert
a.crerar-gilbert@nhs.net

The 6 months post is primarily aimed at trainees pursuing career in cardiothoracic anaesthesia. However it will benefit anaesthetists who will embark on any major surgery such as vascular, major abdominal and management of major trauma.

Advanced cardiac trainee will have an exposure to a wide variety of cardiac surgical, thoracic, large airways and cardiology procedures. The overall aim is for a trainee to acquire experience up to the level of clinical independence and ability to manage own daily cardiac /thoracic operating lists.

Background

- Location: St Georges Hospital

Resources available at St George's:

- Four cardiothoracic operating theatres, performing about 1200 cardiac and above 2000 thoracic surgeries a year.
- Five Cardiac Catheter laboratories providing mapping and ablations of cardiac arrhythmias as well as TAVI transcatheter aortic valve insertions
- Largest in Europe Large Airways intervention center with weekly rigid bronchoscopy lists carrying treatment of large airways compromise including laser interventions and stent insertion.
- Variety of complex cardiac procedures include complex mitral valve repairs, tricuspid valve surgery, aortic root and ascending aorta replacement, septal myectomies and others.
- Cardiac surgery undertakes emergency procedures including repair of aortic dissection, repair of VSD and treatment of complications of bacterial endocarditis.
- Four modern TOE machines with 3D function are available for daily use in all cardiac surgical cases.
- TEG and platelet mapping equipment for use in cardiac theatres.
- Disposable bronchoscopes are available for all double lumen tubes insertion.
- All cardiac consultants are skilled in TOE.
- Majority of cardiac consultants have BSE or equivalent accreditation. Number of consultants examine for BSE accreditation and are supervisors for TOE log books.

Clinical Aims

During advanced module the trainee will demonstrate:

- Independent practice for most elective cardiac surgical procedures such as CABG (on and off pump) and AVR.

- Understanding of management of some complex surgery such as MVR, complex aortic surgery including surgery on the aortic arch and MIDCAB .
- Proficiency in lung isolation techniques using bronchoscopic guidance.
- Understanding of TAVI (transcatheter aortic valve implantation) procedures including selection criteria, preoperative assessment and intraoperative management.
- Advanced use of perioperative TOE.
- Ability to perioperatively manage high risk patients with complex cardiac and respiratory disease.
- Procedural technical skills generic to any major surgery.
- Ability to treat intraoperative haemodynamic instability and compromise.
- Ability to manage intraoperative coagulation derangements guided by bedside functional analysis.

Academic and Management Aims

During module trainee will be supported and encouraged to:

- Complete a scientific or quality improvement project
- Present at the ACTA or EACTA (Association of Cardio-Thoracic Anaesthetists, European Association of Cardio-Thoracic Anaesthetists)
- Achieve authorship in scientific journals and/or textbooks

Teaching Aims

During module trainee will have opportunities to engage in following in house learning:

- CHO meeting (weekly on Friday morning)
- Heart-works simulator - hands on formal scheduled session on Wednesday afternoon
- Heart-works simulator available for a trainee at times suitable to individual needs
- In house CALS (Cardiac Surgical Advanced Life Support) course
- Cardiac ICU/anaesthesia tutorials twice weekly
- CT registrars teaching session (weekly on Tuesday mornings)
- MDT meetings on Wednesday mornings.
- Departmental meetings (weekly)

Summary

CT unit provides resources and environment conducive to education and training. All consultants are keen to teach and to explore your potential. You will be supported and encouraged to take on responsibilities tailored to your individual abilities and needs. You will be offered solo lists only when you are confident enough and ready for it.

Above all we hope that you will find the advanced module challenging, stimulating and enjoyable. Previous trainees can attest to this.

Regional Advanced Module SGH

Module Supervisor: Dr Ralph Zumpe
ralph.zumpe@stgeorges.nhs.uk

Background

- St George's Hospital
- One or two ST6/7 trainees for 6 month duration
- Minimum of 4 sessions per week dedicated to lists where regional anaesthesia is performed
- Regular Regional Anaesthesia List Allocation at Epsom Orthopaedic Centre (supernumerary training)
- The St Georges Advanced regional module allows the trainee greater exposure to Upper/ Lower Limb RA in preparation of either a Consultant post in a major referral centre, or to act as a lead in a smaller unit.
- Primarily you will be in day surgery (DSU) where there are frequent HMU (hand management unit) plastics lists. You are encouraged to go and look for other block opportunities if there is none on your list and will be expected to provide FIB Service in A&E and on the orthopaedic wards. In the beginning of a module you will be directly supervised but as you gain experience you will be expected to be able to perform block with more distant supervision.
- It has also been arranged that you will go to Epsom Orthopaedic Centre where you are able to gain experience doing other orthopaedic lists with Regional Anaesthesia.

Clinical Aims

- Demonstrates ability to perform both lower and upper limb plexus/ regional blocks with distant supervision
- Always considers the option of regional anaesthesia in appropriate clinical contexts
- Appropriate number of cases and case mix

Academic and Management Aims

- Attend an ultrasound course on RA (ideally before start of module)
- Attend a major meeting on RA to present your project
- Presentation of interesting case and/or audit project on departmental meeting
- Trainees are expected to be a member of ESRA/ESRA-UK/LSORA

Teaching Aims

- Involvement in teaching on the St Georges Regional Anaesthesia Course and Scanning Club

Testimonials and Accomplishments

- Past trainees have regularly presented their work at conferences such as ESRA, RAUK and have been part of faculty for regional courses, including St Georges Regional course.
- Past projects included successful introduction of Quadratus Lumborum Block, patient satisfactions and outcomes in regional anaesthesia.
- There are also numerous ongoing projects which trainees can get involved with.

Trauma SGH

Module Supervisor: Lt Col G Sanders

guy.sanders@stgeorges.nhs.uk

Background

- St George's Hospital
- The Trauma Audit Research Network (TARN) shows that St George's Hospital receives between 750 and 950 major traumas per year.
- Relevant contacts, theatres and key information
- St George's is the primary receiving centre for Kent Surrey Sussex air ambulance, in its first year of operation Apr 2014-5 the helipad received 183 major trauma patients, 83% from KSS. The patients had a median injury severity score of 24 and 13% of patients were classed as a code red (haemodynamic instability and in-flight transfusion). The predominant mechanism of injury was road traffic accident accounting for 59%, penetrating injury remaining relatively rare at 4%.
- As a result St George's offers excellent exposure to major trauma both within the emergency department and theatre environment. ED trauma calls are predominantly led by ED consultants with an interest in trauma and several of the consultants are also KSS prehospital doctors.
- The data from 2014/15 shows a strong performance resulting in 2 additional survivors for every 100 patients treated, outperforming any of the other London Trauma Centres over the same time period.
- St George's is the tertiary referral centre for all complex trauma in the region and the elective work also by its nature is either complex surgery, a high risk patient or both.
- Paul Calvert theatres are the main trauma and orthopaedic theatres.
- The module is supervised by Lt Col Guy Sanders a military anaesthetist with operational experience in Iraq and Afghanistan.

Clinical Aims

- There is opportunity to undertake the trauma team leader course which is run in-house and then do sessions in the ED doing supervised trauma team leading which is a core learning outcome of the advanced trauma module.
- Experience that can be garnered here varies from the acute surgical management of code red trauma through to elective and urgent orthopaedics and orthopaedic trauma.
- All facets of orthopaedics are covered including upper and lower limb trauma, pelvic and spinal surgery.
- There is also extensive opportunity for developing regional anaesthetic skills in upper and lower limb blocks and central neuroaxial blockade.
- Outside of Paul Calvert theatres St George's is able to offer opportunities in a variety of anaesthetic sub-specialties. According to individual need time can be arranged in other theatre areas for example thoracics and vascular which can compliment major trauma experience.

Academic and Management Aims

- There will be opportunity to participate in audit and quality improvement.

Teaching Aims

- There will be opportunity to teach on local and regional trauma study days

Vascular Anaesthesia SGH

Module Supervisor: Grainne Nicholson
gnichols@sgul.ac.uk

Background

- St Georges Hospital
- St George's is one of the biggest UK centres for vascular surgery, We can offer a sub-specialised module in this area.
- We do about 250 EVAR / TEVARs per year, increasing annually, 50-60 CEA's, around 15+ Hybrids, 60-70 revascularisations lower limbs so there is enormous scope for consolidating clinical practice.
- Relevant contacts, theatres and key information
- Relevant specialist societies and resources

Clinical Aims

- Gain mastery in the delivery of safe and effective perioperative anaesthetic care to patients undergoing complex vascular procedures [including intrathoracic], both for elective & emergency cases and in the operating theatres and in interventional radiology suites
- Gain mastery in the management of such major cases demonstrating the necessary multi-disciplinary leadership, communication and team-working skills necessary to ensure the care delivered benefits both the patient and the organisation
- Gain maturity in understanding the importance of utilising the time allocated to clinical sessions effectively, optimising throughput whilst not compromising patient safety
- Gains the necessary maturity to guide the choice of audit cycles in developing practice
- Becomes familiar with recent developments in perioperative anaesthetic care for vascular surgery, to evaluate these developments and to advise colleagues of useful changes in practice
- Complete for logbook:
 - 30 carotid endarterectomies
 - 30 EVAR including at least 5 thoracic or fenestrated EVAR
 - 10 Open aneurysms
 - 4 Thoracic aneurysms