



EACTA EXCHANGE TRAINING OBSERVERSHIP PROGRAMME IN VASCULAR ANAESTHESIA

Learning Objectives: (VASGBI¹)

1. To gain knowledge of the perioperative anaesthetic management of patients undergoing elective and emergency abdominal aortic surgery.
2. To gain knowledge of the perioperative anaesthetic management of patients undergoing elective and emergency peripheral vascular surgery.
3. To gain knowledge of the perioperative anaesthetic management of patients undergoing elective and emergency TEVAR and EVAR.
4. To gain knowledge of the perioperative anaesthetic management of patients undergoing carotid endarterectomy and stenting.

Essential and Clinical Learning outcomes

- Gain the knowledge in the delivery of safe and effective perioperative anaesthetic care to patients undergoing both elective and emergency complex vascular procedures in the operating theatres and in interventional radiology suites.
- Gain the knowledge 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 the knowledge 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.
- 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
- Assist colleagues in making decisions about the suitability of surgery in difficult situations.
- Have experience of the vascular pre-assessment clinic,

Knowledge

- Understanding of scoring systems and risk stratification methods for all vascular cases.
- Understanding of use of functional cerebral monitors during carotid surgery awake and under general anaesthesia.
- Knowledge of pathophysiology of aortic cross-clamping, together with management and mitigation strategies.
- Knowledge of pharmacological adjuncts used in vascular surgery.

Skills

- Attendance at the preoperative assessment clinics of vascular patients.
- Blood conservation strategies.
- Describe the techniques and indications for cardiac output monitoring and modalities



- Involvement in one vascular audit, and if possible participation in vascular research process.

Opportunity for Trainees:

The interested trainees to acquire technical skills in the preoperative assessment, anaesthesia, monitoring, and postoperative care of patients undergoing vascular surgery could join the EACTA Exchange Training Observership Programme in Vascular Anaesthesia.

Duration:

All trainees spend a minimum of two weeks training in vascular anaesthesia during their training in the EACTA Exchange Training Observership Programme in Vascular Anaesthesia as **an observer** at one of the approved host centres which have a high volume of vascular surgery cases to achieve the learning outcomes.

Requirements:

- Language requirements (as per the preference and local regulations at the host centre).
- Specific legal or other requirements as required by the local authorities.
- Preferred seniority level (anaesthesia residents in Level 5 or certified anaesthetist).
- Number of positions per year: 1 trainee every month in a high-volume centre ≥ 33 cases per month.

Financial Statement/I Resources

As a trainee: do you have a scholarship, educational grant, or can you afford the expenses of your travel, transportations, and accommodations?

- **Sources of financial support for the candidate:**
 - Host centre (optional: accommodation and transportation/travel might be provided).
 - Candidate 's centre.
 - Scholarship.
 - Educational grant.
 - Award.
 - Candidate's own expenses

Resources at the Host Centre

- Number of working days per week
- Total dedicated ward beds for vascular surgery
- Number of ICU beds dedicated to vascular surgery patients
- Post-anaesthesia care unit for vascular patients
- Monitoring and advanced life support equipment
- Dedicated operating rooms for vascular surgery
- Interventional vascular facility



- Outpatient Clinic for perioperative evaluation of patients undergoing vascular procedures
- 24-hours acute pain service available for patients undergoing vascular procedures
- Meeting Rooms
- Classrooms with visual and other educational aids
- Study areas for trainees
- Office space for faculty members and trainees
- Diagnostic facilities
- Therapeutic facilities
- 24-hour laboratory services available in the hospital

Academic Education Patient Care

- Duration
- Number of performed procedures / week around 8-9 procedures.

Competency Area

Settings/Activities

- Following the standards for patient care and established guidelines and procedures for patient safety, error reduction, and improved patient outcomes.
- Pre-operative patient evaluation and optimization of clinical status prior to the complex and minor vascular procedures.
- Interpretation of cardiovascular and neuromonitoring data.
- Objectives, indications, and targets of cerebrospinal fluid drainage.
- Pharmacological and mechanical circulatory support.
- Peri-operative critical care, including ventilatory support and peri-operative pain management.
- Providing anaesthesia care for patients undergoing open and endovascular vascular surgery.

Medical Knowledge

- Indicate the teaching activities (e.g. lectures, conferences, journal clubs, clinical teaching rounds, etc.) in which trainees will demonstrate knowledge in each of the following areas. Also indicate the method(s) used to assess competence.

Area of Knowledge

Settings/Activities

- Embryological development of the thoracic aorta and major vessel structures.
- Pathophysiology, pharmacology, and clinical management of patients undergoing vascular procedures.
- Pre-anaesthetic evaluation and preparation of adult vascular patients.
- Invasive and minimally-invasive haemodynamic and neurological monitoring.
- Pharmacokinetics and pharmacodynamics of medications prescribed for clamping and de-clamping of thoracic and abdominal aorta.



- Pain management of adult vascular surgical patients.
- Pain management for phantom limb pain.
- Quality assurance/ improvement.
- Ethical and legal issues, and practice management.

Evaluation of Trainees

- The Programme Supervisor will give an appraisal for each fellow following the Observership.
- The host centre will be able to maintain a register of those fellows who have entered and successfully completed a training programme.

References:

1. <https://www.vasgbi.com/downloads/training/Vascular%20Anaesthetic%20Training%20v3-1.pdf>