BASIC PHLEBOLOGY TRAINING

(Training Manual Excerpts)

Minimum Training Requirements
The following are the minimum requirements that need to be met before the candidate can apply to sit for the Part I Clinical Examination. Certification in Sclerotherapy will NOT be awarded without evidence of compliance with ALL the following requirements. In exceptional circumstances some of these requirements may be deleted at the discretion of the Board of Censors.

Part I Written Examination.
A Pass in the Written Examination is required before the candidate is invited to sit the Clinical Examination.

Basic Phlebology Certificate Course
The course aims to prepare candidates for the Phlebology Part I Examination. One attendance is the minimum requirement. The Candidates are advised to attend the Basic Phlebology Certificate course before sitting the Written Examination.

Basic Phlebology Preceptorship
For practitioners with no prior experience in Sclerotherapy, the Basic Phlebology Preceptorship is a Basic Phlebology Training requirement. Participation in the Basic Phlebology Preceptorship can be done before or after the Written Examination (preferably before).

Vein School, Clinical Meetings & Journal Club
All candidates must attend at least 6 meetings and must have proof of attendance.

Logbook Requirements
40 cases of CW-Doppler examination
1. Logbooks to be completed.
2. 30 venous incompetence and 10 ABI measurements.
3. Supervisor’s signature required (can be an ACP certified sclerotherapist, phlebologist, vascular surgeon, or vascular physician).

100 direct vision sclerotherapy procedures
1. Logbooks to be completed.
2. 20 cases to be done under direct supervision.
3. Supervisor’s signature required (can be an ACP certified sclerotherapist, or a phlebologist, Fellow Australasian College of Phlebology)
**Phlebology Part I Examination**

**WRITTEN EXAMINATION**

The Written Examination tests the theoretical knowledge of the candidate in basic phlebology with an emphasis on sclerotherapy. The Written Examination is an MCQ paper. This paper consists of 100 multiple choice questions (5 parts each- total of 500 questions) over a 2-hour period in true/false format. There are no negative markings in the multiple choice question paper. This examination will cover a range of topics including venous anatomy, physiology and pathology, Doppler principles, CW-Doppler, duplex examination, telangiectatic conditions, principles of sclerotherapy, sclerosing agents and their mechanism of action, complications of sclerotherapy, thrombophilia, physical principles of compression and compression therapy. It is advisable that the Candidate has attended the Basic Phlebology Certificate course before sitting the Written Examination.

**CLINICAL EXAMINATIONS**

The Clinical Examinations are conducted approximately 2 months after the Written Examination. Only candidates who have successfully passed the Written Examination are invited to sit for the Clinical Examinations.

**OSCEs**

This includes examinations in diagnostic procedures and sclerotherapy techniques. These examinations follow the OSCE (Objective Structured Clinical Examination) format and are supervised by the Chief Censor together with members of the Board of Censors and qualified phlebologists from the particular State in which the examination is being held. Each station is manned by an examiner. A photograph, a model or a device with a written question is presented. The examiner will read the question to the candidate and the candidate is expected to answer the question. As this is an OSCE, no further elaboration or explanation regarding the question will be provided by the examiner. The bell will ring and the candidate will move to the next station. There are no patients in this examination.

**Short Cases**

This part encompasses a number of short cases which will be run along modified OSCE lines with individual stations manned by members of the Board of Censors and qualified phlebologists from the particular State in which the examination is being held. Two examiners will be present per short case station. The examination is done on real patients. Candidates are expected to do a general examination, perform a CW-Doppler examination, interpret any duplex findings and blood tests, be able to formulate the patient’s problem, suggest further investigations and a plan of management. The candidate must demonstrate competence in performing a CW-Doppler examination.
Phlebology Part I Syllabus

- Anatomy and physiology of the venous system
- Venous hypertension and its complications
- Pathophysiology of varicose veins and telangiectasias
- Diagnostic techniques
- CW-Doppler competency
- Principles of duplex ultrasound
- Thrombophilia and hypercoagulable states
- Diseases with telangiectatic manifestations
- Indications and contra-indications of sclerotherapy
- Sclerosing agents and their mechanism of action
- Pharmacokinetics and pharmacodynamics of sclerosing agents
- Adverse effects and complications of sclerotherapy
- Techniques of sclerotherapy
- Indications, contraindications, techniques of ultrasound guided sclerotherapy
- Indications, contraindications, techniques of endovenous laser ablation
- Indications, contraindications, techniques of venous surgery
- Principles of compression therapy
- Medicolegal and ethical aspects of sclerotherapy
- Infection control
**Reading List**

**Examinable**

**Texts**
For all books listed, the latest edition is recommended. Any textbook which becomes available after 31 December of the year preceding the examination will not be used for questions. Outdated, erroneous or controversial information in recommended textbooks will be excluded and not examined.


**Journals**
Relevant articles for the two years up to 31 December of the year prior to the examination should be known in detail.

- Australian & New Zealand Journal of Phlebology

- Journal of Dermatologic Surgery

**Other**
Product information sheets for the most commonly used sclerosants.
Advanced Phlebology Training

In the 3-year Advanced Training Period, the minimum requirements for formal training in Australia and New Zealand are:

4 supervised phlebology clinics per week
a. Or equivalent of forty-eight supervised phlebology clinics (96 hours) per 3 months.
b. Clinics to be supervised by a College fellow.
c. The candidate is directly responsible for patient care.

1 diagnostic ultrasound session per week
a. Or equivalent of 12 sessions (24 hours) per 3 months.
b. Scanning to be supervised by a College fellow or vascular sonographer.
c. The trainee to personally perform the scanning.

1 supervised interventional phlebology session per week
a. Or equivalent of 12 sessions (24 hours) per 3 months.
b. The trainee to personally perform ultrasound guided sclerotherapy, endovenous laser therapy and other interventional procedures under supervision.

Vein School, Clinical Meetings & Journal Club
All candidates must attend at least 18 meetings and must have proof of attendance.

40 cases of CW-Doppler examination
a. Logbooks to be completed.
b. 30 venous incompetence and 10 ABI measurements
c. Supervisor’s signature required (can be an ACP certified sclerotherapist, phlebologist, vascular surgeon, or other specialist).

100 cases of duplex ultrasound examination
a. Logbooks to be completed.
b. Both superficial and deep venous systems.
c. Include both upper and lower limbs.
d. Include both incompetence and thrombotic studies.
e. Supervisor’s signature required (can be a phlebologist, vascular surgeon, or other specialist with formal training in venous ultrasound).

100 ultrasound guided sclerotherapy procedures
a. Logbooks to be completed.
b. Liquid and/or foam sclerosant (either assisted or non-assisted).
c. 20 cases to be done under direct supervision.
d. Supervisor’s signature required (must be a phlebologist, Fellow Australasian College of Phlebology, accredited in UGS).
20 endovenous laser ablation procedures
a. Logbooks to be completed.
b. 10 cases to be done under direct supervision
c. Supervisor's signature required (must be a phlebologist, Fellow Australasian College of Phlebology, accredited in EVLA).

20 management cases of chronic venous disease
a. Logbooks to be completed.
b. Management of patients with CEAP stages C4-C6 is accepted.
c. Supervisor's signature required (The supervisor can be a phlebologist, or another specialist in a relevant specialty with an active interest in management of leg ulcers).

20 vascular laser therapy procedures
a. Logbooks to be completed.
b. 10 cases to be done under direct supervision.
c. Supervisor's signature required (can be a phlebologist, dermatologist, or another specialist with formal training in vascular laser therapy).

Observation or assistance in 5 cases of venous surgery
a. Logbooks to be completed.
b. Superficial veins or deep veins.
c. Ambulatory phlebectomy is accepted.
d. Supervisor's signature required (can be a surgical phlebologist, venous or vascular surgeon).

At least one presentation at the Annual Scientific Meeting of ACP
a. The subject of this presentation can overlap with that of the publication requirement.
b. A poster presentation is acceptable.
c. Must be done during the period of Advanced Phlebology Training.

Two publications in the ANZ Journal of Phlebology
a. These may include research articles or case presentations.
b. As all articles are peer reviewed, it is recommended that 6 months should be allowed for acceptance of publication.
c. Those candidates who do not have their publications (or at least a letter of acceptance from the editor) by the closing date of applications for the Part II examination will not be eligible to sit for the Part II examination.
d. It is a requirement for papers to be accepted as valid for the candidate to be the primary author.
e. Application for admission to the Part II examination will not be accepted without evidence of compliance with publication requirements.

**Laser Safety Course**
- a. At least one attendance required.
- b. Copy of Certificate of Attendance to be submitted.
- c. Must be done during the period of Advanced Phlebology Training.

**Advanced Phlebology Course**
- a. At least one attendance required.
- b. Usually held in conjunction with the annual Scientific Meeting of the College.
- c. At least one attendance required.
- d. Must be done during the period of Advanced Phlebology Training.

**Pass in Level 5 (or higher) Advanced Cardiac Life Support (ACLS)**
- a. Copy of Certification to be submitted.
- b. Must be done during the period of Advanced Phlebology Training.
**Phlebology Part II Examinations**

**a. WRITTEN EXAMINATIONS**

1 **General Phlebology (MCQ True/False)**
   This paper consists of 100 multiple choice questions each consisting of 5 parts, over a 2-hour period in true/false format. There are no negative markings in this multiple choice question paper. This exam covers general phlebology.

2 **Phlebological Medicine (Short Essays)**
   This examination consists of two papers each containing 6 questions. The allocated time per paper is 2 hours. Each paper encompasses 6 questions on general phlebology and general medicine pertaining to phlebology. Questions provide clinical scenarios which may require a plan of management.

3 **Procedural Phlebology (MCQ Best Answer)**
   This paper consists of 100 multiple choice questions each consisting of 4 parts, over a 2-hour period in best answer format. There are no negative markings in this multiple choice question paper. This exam covers basic laser physics, laser safety and regulations, ultrasound guided sclerotherapy, endovenous laser therapy, ambulatory phlebectomy, venous surgery, vascular laser therapy and other interventional procedures covered by the curriculum.

4 **Diagnostic Ultrasound in Phlebology (MCQ Best Answer)**
   This paper consists of 120 multiple choice questions each consisting of 4 parts, over a 2-hour period in best answer format. Marks will be deducted for incorrect responses: plus 1 mark for a correct answer, zero marks for no answer, and minus 1 mark for an incorrect answer.

5 **Pharmacology in Phlebology (MCQ True/False)**
   This paper consists of 100 multiple choice questions each consisting of 5 parts, over a 2-hour period in true/false format. There are no negative markings in this multiple choice question paper.

**b. CLINICAL EXAMINATIONS**

The clinical examinations are conducted 4-8 weeks following the written exam. Only candidates who have successfully passed the written exam are invited to sit for the clinical exams.

1 **OSCEs**
   The first section encompasses examinations in diagnostic procedures, imaging techniques, echosclerotherapy and endovenous ablative techniques. These examinations follow the OSCE (Objective Structured Clinical Examination) format and are supervised by the Chief Censor together with members of the Board of Censors and qualified phlebologists from the particular State in which the examination is being held. A photograph, a model or a device with a written
question is presented. As this is an OSCE, no further elaboration or explanation regarding the question will be provided by the examiner. The bell will ring and the candidate will move to the next station. Scanning of patients, a DVT study, a venous incompetence study, upper limb studies and other venous studies may form part of this examination. The candidate must demonstrate competence in performing duplex examinations.

2 Short Cases
This part encompasses a number of short cases which will be run along modified OSCE lines with individual stations manned by members of the Board of Censors and qualified phlebologists from the particular State in which the examination is being held. Candidates are expected to do a general examination, perform a CW-Doppler examination, perform a duplex examination, interpret the duplex findings, be able to formulate the patient’s problem, suggest further investigations and a plan of management.
Reading List

a. Texts
For all books listed the latest edition is recommended. The reading list is offered as a useful source of information and is a basis for study.

Ultrasound Textbooks


• Myers K, Clough A. Making sense of vascular ultrasound: a hands-on guide. Arnold. Relevant VENOUS chapters only. Available from Alliance Distribution Services, 9 Pioneer ave. Tuggerah 2259. Phone: (02) 4390 1300 or (02) 4390 1355.

Thrombosis and Haemostasis


Phlebology


Laser Safety


Pharmacology of Phlebology

• College Notes.

• Product Information Sheets for all drugs.

Fellowship requirements are:

1. Possession of a medical degree and registration as a medical practitioner in Australia or New Zealand.
2. At least two years acceptable training in a teaching hospital (post-graduate year 1 and 2) or equivalent recognized by the ACP.
3. Successful completion of the Basic Phlebology Training program.
4. Successful completion of the Advanced Phlebology Training program.
5. Election to College.
6. Payment of annual subscription fee.