



*Union Européenne des Médecins Spécialistes
European Union of Medical Specialists
Since 1958: 38 sections among which Vascular Surgery*



European Standard for Training and Qualification in Vascular Surgery

Armando Mansilha MD, PhD, FEBVS
UEMS SBVS Secretary General



1958 UEMS foundation

objectives

- promote the highest level of patient care in the EU
- promote the harmonization of high-quality training programs within the various specialities throughout the EU
- facilitate the free exchange of training and work of trainees and medical specialists between the various member countries

2004 Section of Vascular Surgery

independent and separate



UEMS family



37 National Member countries

42 Specialist Sections

11 Multi-disciplinary Joint Committees

10 Divisions

3 Thematic Federations



ACTIVITIES UEMS SBVS



General and Administration

EVCCME Committee

EBVS Examinations

Registry and Territorial Expansion



General and Administration



National delegates contacts

Website www.uemsvascular.com

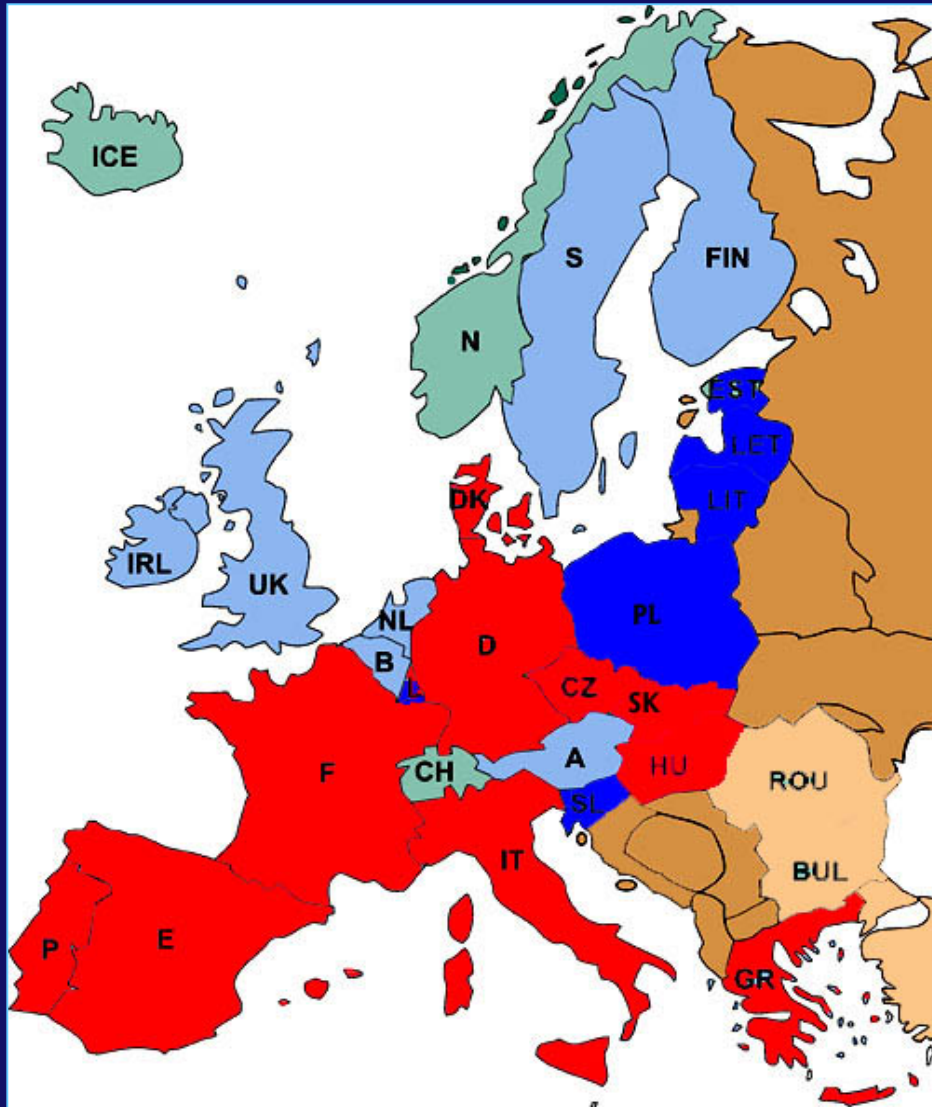
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Vascular Surgery in Europe



Heterogeneous training, certification and recognition of independent specialism





Speciality status



I - Independent

S - Subspeciality

N - Not a speciality

- VS training incorporated into GS residency

- contained within GS training for selected trainees in special vascular units

- VS training incorporated into cardiothoracic residency



Minimum training required



Country	Years GS	Years VS	Total
Austria	6	3	9
Belgium	6	2	8
Croatia	4	2	6
Cyprus	3	4	7
Czech Republic	2	4	6
Denmark	2	5	7
Finland	3	3	6
France	2	4	6
Germany	3	3	6
Greece	3	4	7
Hungary	6	2	8
Ireland	7	2	9
Italy	1	4	5
The Netherlands	6	2	8
Norway	5	3	8
Portugal	1	5	6
Russia	2	3	5
Slovakia	2	4	6
Spain	1	4	5
Sweden	5	2	7
Switzerland	6	3	9
Turkey	5	0	5
United Kingdom	1	5	6

RANGE 5 - 9
AVERAGE 6.9



Program accreditation and trainee certification



<i>Country</i>	Programs accredited by	Site visit required?	Trainees certified by
Austria	National assoc	Yes	National assoc
Belgium	Speciality society	No	Speciality society
Croatia	Government	No	Government
Cyprus	Government	No	Government
Czech Republic	Government	No	Government
Denmark	Government	Yes	Government
Finland	University	No	University
France	Government	No	Speciality society
Germany	National assoc	No	Speciality society
Greece	Government	No	Government
Hungary	Speciality society	Yes	Speciality society
Ireland	Speciality society	Yes	Speciality society
Italy	University	Yes	University
The Netherlands	Speciality society	Yes	Speciality society
Norway	National assoc	Yes	National assoc
Portugal	National assoc	Yes	National assoc
Russia	Government	Yes	National assoc
Slovakia	Government	No	Speciality board
Spain	Government	No	Government
Sweden	Government	Yes	Speciality society
Switzerland	Speciality society	No	Speciality society
Turkey	Government	Yes	Government
United Kingdom	General Medical Council	Yes	Speciality board / JCHST



Examinations required



<i>Country</i>	Written	Oral	Case load
Austria	No	No	No
Belgium	No	Yes	Yes
Croatia	No	Yes	No
Cyprus	No	Yes	Yes
Czech Republic	Yes	Yes	Yes
Denmark	No	No	Yes
Finland	Yes	No	Yes
France	Yes	Yes	Yes
Germany	No	Yes	Yes
Greece	No	Yes	Yes
Hungary	No	Yes	Yes
Ireland	No	Yes	Yes
Italy	No	Yes	Yes
The Netherlands	No	Yes	Yes
Norway	No	No	Yes
Portugal	Yes	Yes	Yes
Russia	Yes	Yes	Yes
Slovakia	Yes	Yes	Yes
Spain	No	No	Yes
Sweden	No	Yes	Yes
Switzerland	Yes	Yes	Yes
Turkey	Yes	Yes	Yes
United Kingdom	Yes	Yes	Yes



COMMENT

large differences in requirements and length of training in Vascular Surgery within the EU



stresses the importance of harmonization in training and certification in Vascular Surgery within the EU



1. Training requirements

2. Core Curriculum

1. Qualification and Accreditation



Training Requirements



1. for Trainees
2. for Trainers
1. For Training Institutions



Current Status



1. currently a European specialist qualification in any speciality, including vascular surgery, does not replace an accreditation by the national authorities, which is the primary specialist accreditation recognized by law by all member countries
2. in countries where there is a government approved national examination, the FEBVS assessment cannot and should not be used to bypass national qualifications



Thus, the European Qualification, entitling those who pass the examination as FEBVS, must be seen as a respected qualification and an European quality mark



Motivation European Examination



- To harmonize knowledge and skills
- To indicate that the candidate has passed a structured training program
- To guarantee a minimal level of competence
- Promote exchange between countries by establishing a standard: FEBVS (Fellow European Board of Vascular Surgery)



The Structure of the Examination



Part I (Eligibility)

- Certificate: CCST (*)
- Logbook (endo)vascular procedures; signature / validation by supervisor
- Letter from the National Vascular Society

Part II (Oral)

- Viva voce and technical skills assessment

() Certificate of Completion of Specialist Training*



EBVS Logbook



Open Vascular Procedures 80

- Basic 20
- Intermediate 40
- Advanced 20

Endovascular Procedures 50

- Basic 20
- Intermediate 20
- Advanced 10



EBVS Examination (Part I I)



Five parts: and 50-60 examiners

1. Clinical case analyses (4 cases)
2. Academic Viva; one paper
3. Overall assessment
4. Open Technical skills assessment
5. Endovascular skills assessment



Clinical Examination



- Examiners Briefing
- 4 vivas of 15 minutes each
- AAA
- Lower limb
- Endovascular
- Miscellaneous
- Two examiners; **mark INDEPENDANTLY**
- Fixed marking scheme 4-8
- Pass mark 6



Marking Descriptors



Marking System*	Overall Professional Capability / Patient Care					Knowledge and Judgment			Quality of Response	
	Personal qualities	Professionalism and ethics	Surgical experience	Adaptability to stress	Ability to deal with grey areas	Knowledge	Ability to justify	Clinical reasoning	Communication skills	Organisation and logical thought process
4	<ul style="list-style-type: none"> The candidate demonstrated incompetence in the diagnosis and clinical management of patients to a level which caused serious concerns to the assessor 					<ul style="list-style-type: none"> Did not get beyond default questions Failed in most/all competencies Very poor basic knowledge/judgment Serious concerns about his/her performance 			<p>Q: Does not get beyond default questions</p> <p>A: Disorganised/confused/inconsistent answers, lacking insight/poor English</p> <p>P: Prompts do not work</p>	
5	<ul style="list-style-type: none"> The candidate failed to demonstrate competence in the diagnosis and clinical management of patients 					<ul style="list-style-type: none"> Demonstrated a lack of understanding Difficulty in prioritising Gaps in knowledge Poor deductive skills Poor higher order thinking Significant errors Struggled to apply knowledge/judgment/management Variable performance 			<p>Q: Frequent use of default questions</p> <p>A: Confused/disorganised answers; hesitant and indecisive</p> <p>P: Required frequent prompting</p>	
6	<ul style="list-style-type: none"> The candidate demonstrated competence in the diagnosis and clinical management of patients 					<ul style="list-style-type: none"> Good knowledge and judgment of common problems Important points mentioned Instils confidence No major errors 			<p>Q: Copes with competence questions</p> <p>A: Methodical approach to answers; has insight</p> <p>P: Requires minimal prompting</p>	
7	<ul style="list-style-type: none"> The candidate demonstrated confidence and competence in the diagnosis and clinical management of patients 					<ul style="list-style-type: none"> Ability to prioritise Coped with difficult topics/problems Good decision making/provided supporting evidence Reached a good level of higher order thinking Strong interpretation/judgment but didn't quote the literature 			<p>Q: Goes beyond the competence questions</p> <p>A: Logical answers and provided good supporting reasons for answers</p> <p>P: Fluent responses without prompting, but some prompting on literature</p>	
8	<ul style="list-style-type: none"> The candidate demonstrated confidence and competence in the diagnosis and clinical management of patients to a level which would inspire confidence in the patient 					<ul style="list-style-type: none"> At ease with higher order thinking Flawless knowledge plus insight and judgment Good understanding/knowledge/management/prioritisation of complex issues Had an understanding of the breadth and depth of the topic, and quoted from literature High flyer Strong interpretation/judgment 			<p>Q: Stretches assessors – answers questions at advanced level</p> <p>A: Confident, clear, logical and focused answers</p> <p>P: No prompting necessary</p>	

*The Marking System scale equals other marking scales using the digits 1-5

[Q: questions A: answers P: prompting]

Report

- The candidate was taken through the AAA case. He was extremely slow and unable to get beyond the simple questions. He required multiple prompts and was unable to recall the findings of the EVAR 1 and DREAM studies and despite the elderly patient (85years) having significant co morbidities and an AAA of 5.4 cms he wished to procede with EVAR. We felt that he lack insight and was unable to produce a logical management plan

Report

- *The candidate was awful*
- *We both felt he was useless and he would never work in my country.*
- *Is he a doctor ??*



Failure

Mark	Overall	Knowledge and Judgement	Quality of Response
4	Demonstrated incompetence in diagnosis and management Serious Concerns	Did not progress beyond basic questions Very poor basic knowledge	Disorganised Confused Lack of insight Prompts did not work
5	Failed to demonstrate competence in diagnosis and management	Poor deductive skills Failed to apply knowledge Significant errors Poor higher order thinking Lack of understanding	Disorganised answers Required frequent prompts but hesitant and indecisive



Academic viva



- Examiner pre briefing
- 20 minutes
- Paper
- JVS
- Two examiners
- Score system 4-8
- The pass mark is 6 for each element.

Randomized controlled trial of remote endarterectomy versus endovascular intervention for TransAtlantic Inter-Society Consensus II D femoropopliteal lesions

Roberto Gabrielli, MD, PhD,^a Maria Sofia Rosati, MD, PhD,^b Silvio Vitale, MD,^a Giulia Baciarello, MD,^b Andrea Siani, MD, PhD,^a Roberto Chiappa, MD,^a Giovanni Caselli, MD,^a and Luigi Irace, MD, PhD,^a *Rome, Italy*

JOURNAL OF VASCULAR SURGERY
December 2012



Overall Assessment

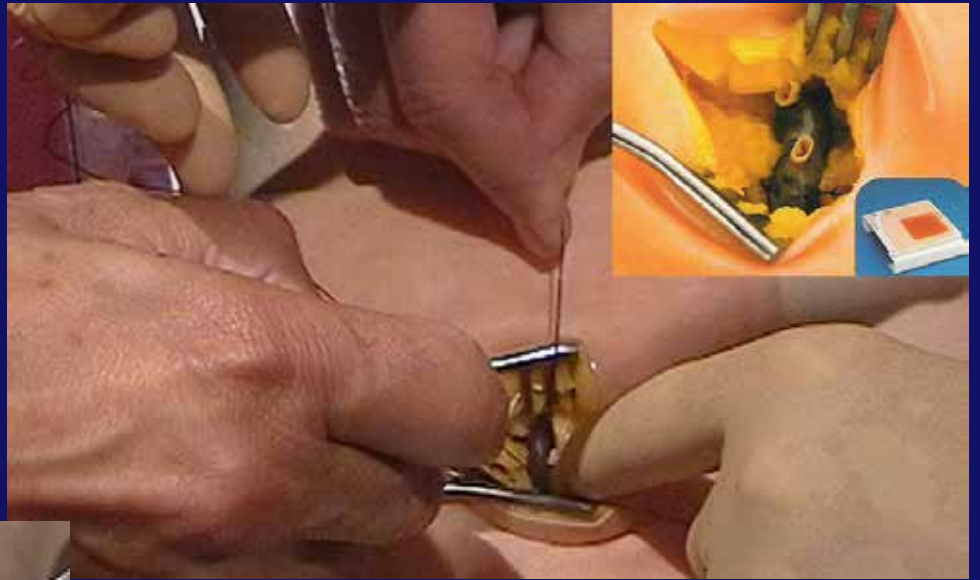


- Examiners Prebriefing
- 30 minutes
- Two assessors
- Questions about indications, guidelines, evidence, trials,...
- Score System 4-8 for each element



Three-station bench assessment

- Carotid endarterectomy
- Distal anastomosis
- Aortic anastomosis



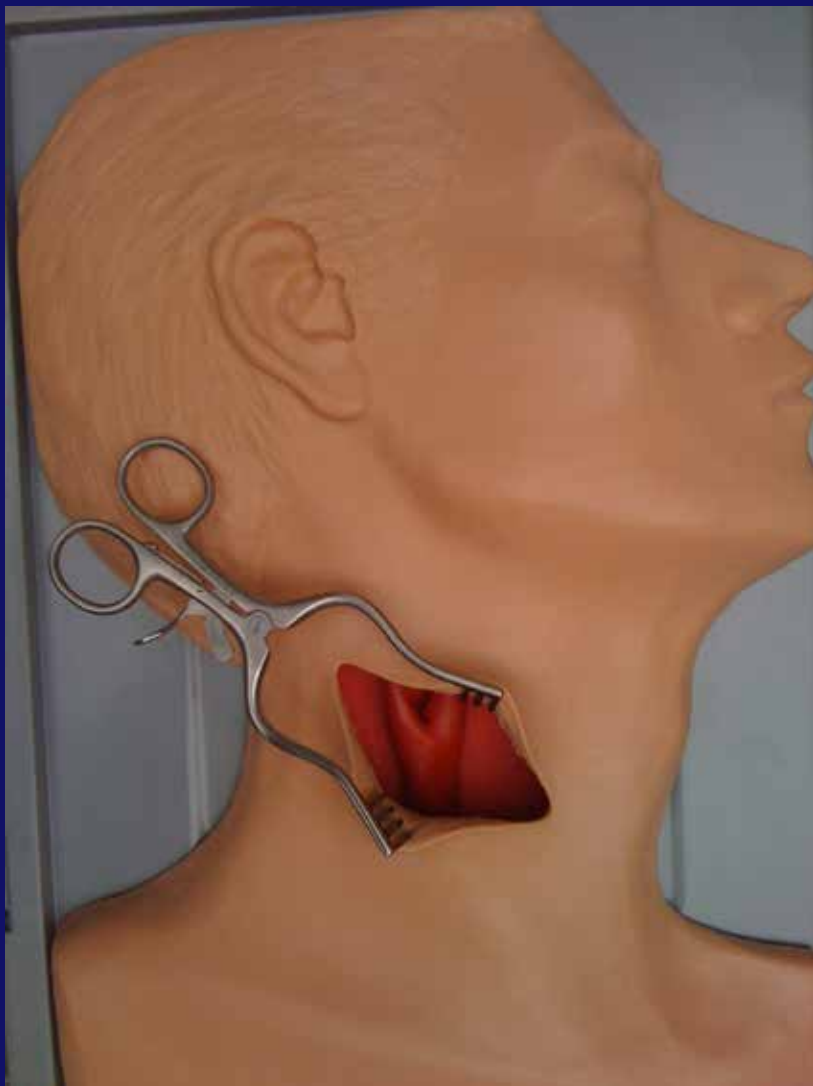


Maastricht 2015





Carotid Simulator





Leg Simulator





Aortic Simulator





Rating scales



Generic Surgical Skill

8 Components

Five point scale

Generic (All procedures)

Objective structured assessment of technical skill – Global rating scale

Surgeon code: _____ Procedure: _____ Assessor: _____ Date: _____

Please circle the candidate's performance on the following scale:

	1	2	3	4	5
Respect for tissue	1 Frequently used unnecessary force on tissue or caused damage by inappropriate use of instruments	2	3 Careful handling of tissue but occasionally caused inadvertent damage.	4	5 Consistently handled tissues appropriately with minimal damage.
Time and motion	1 Make unnecessary moves.	2	3 Efficient time/motion but some unnecessary moves.	4	5 Clear economy of movement and maximum efficiency.
Instrument handling	1 Frequently asked for the wrong instrument or used an inappropriate instrument	2	3 Competent use of instruments although occasionally appeared stiff or awkward.	4	5 Fluid moves with instruments and no awkwardness.
Suture Handling	1 Awkward and unsure with repeated entanglement, poor knot tying and inability to maintain tension.	2	3 Careful and slow with majority of knots placed correctly with appropriate tension.	4	5 Excellent suture control with placement of knots and correct tension.
Flow of operation	1 Frequently stopped operating or needed to discuss the next move.	2	3 Demonstrated some forward planning and reasonable progression of procedure.	4	5 Obviously planned course of operation with efficiency from one move to another
Knowledge of procedure	1 Insufficient knowledge. Looked unsure and hesitant.	2	3 Knew all important steps of the operation.	4	5 Demonstrated familiarity with all steps of the operation.
Overall performance	1 Very poor	2	3 Competent	4	5 Clearly superior
Quality of final product	1 Very poor	2	3 Competent	4	5 Clearly superior

Total score: _____



Procedural Skill

Unique to procedure

Five point scale

High inter-observer reliability and validity

Imperial College Evaluation of Procedure-specific Skill

Graft-to-Artery Anastomosis

Candidate no: _____
 Assessor: _____
 Date: _____

Please circle the candidate's performance on the following scale:

	1	2	3	4	5
Vessel control	1 <small>Poor use of slings or clamps. Inadequate positioning of vessel.</small>	2	3 <small>Competent use of slings or clamps. Adequate positioning of vessel.</small>	4	5 <small>Excellent control of vessel through superior positioning and use of slings/clamps.</small>
Arteriolyomy	1 <small>Poor handling of scalpel. Jagged anteriority or posterior wall damage.</small>	2	3 <small>Competent.</small>	4	5 <small>Superior handling of scalpel. Least anteriority.</small>
Graft opening on native vessel	1 <small>Poor use of Potts scissors. Graft opening wrong site or shape.</small>	2	3 <small>Competent.</small>	4	5 <small>Exhibits familiarity with technique. Graft opening of appropriate size and shape.</small>
Graft shaping	1 <small>Poor. Did not know how to fashion the graft.</small>	2	3 <small>Graft shaped adequately.</small>	4	5 <small>Graft shaped to maximize anastomotic cross-sectional area. Clearly superior.</small>
Anastomosis	1 <small>Unfamiliar with all techniques of graft anastomosis. Poor needle handling.</small>	2	3 <small>Competent use of paracelsus or other technique to anastomose vessels.</small>	4	5 <small>Looked comfortable and familiar with technique. Superior anastomotic technique.</small>
Vessel handling	1 <small>Handled vessel excessively.</small>	2	3 <small>Competent.</small>	4	5 <small>Absentee, neatly retracted native vessel.</small>
Wall apposition	1 <small>Poor apposition of vessels.</small>	2	3 <small>Reasonable wall apposition.</small>	4	5 <small>Excellent vessel apposition.</small>
Overall technical quality	1 <small>Excessive stenosis of vessel. Sutures placed in high/inner intima. Likely to leak.</small>	2	3 <small>Some stenosis of vessel however reasonable intima intimal apposition. Suture placement adequate.</small>	4	5 <small>Minimal cross-sectional area stenosis. Good suture line. A clearly superior end-product. Looked secure.</small>

Total score: _____

Regional Vascular Unit and the Department of Surgical Technology and Devices, Imperial College School of Medicine, London, 2002



STRESS - machine ()*

Simulator for

Testing

Radiological and

Endovascular

Skills

Not a TRAINING but a TESTING machine. Simple objectives (catheter/guidewires); Contrast, Balloons, Stents not necessary. Jan Blankensteijn



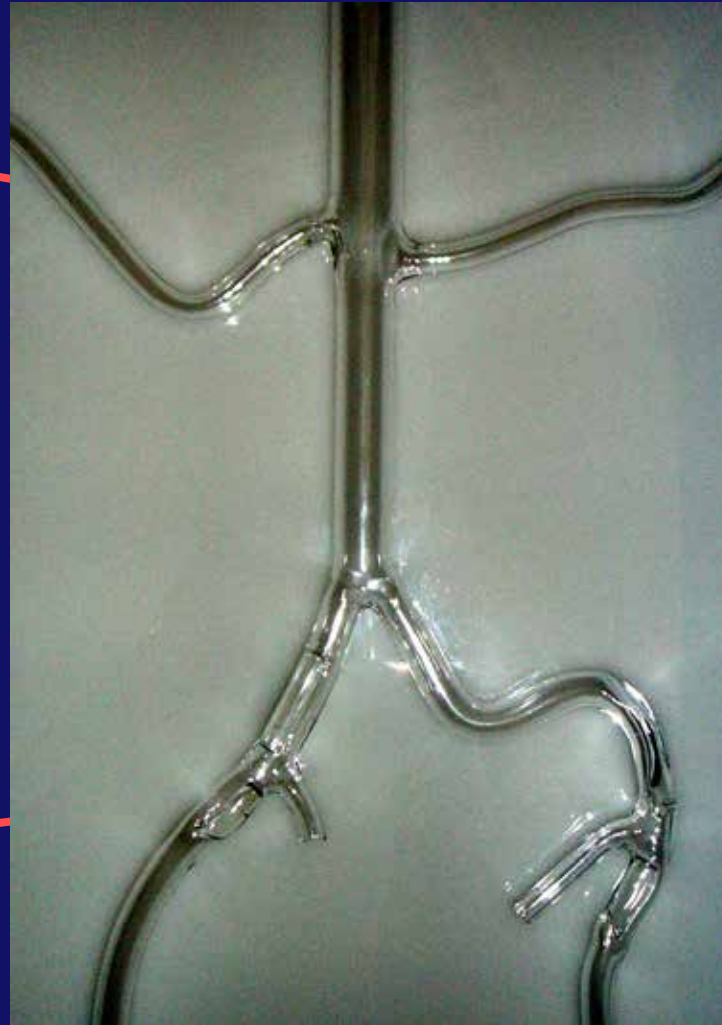
Endovascular Glass Model



RA osteal
Stenosis

Straight
Side

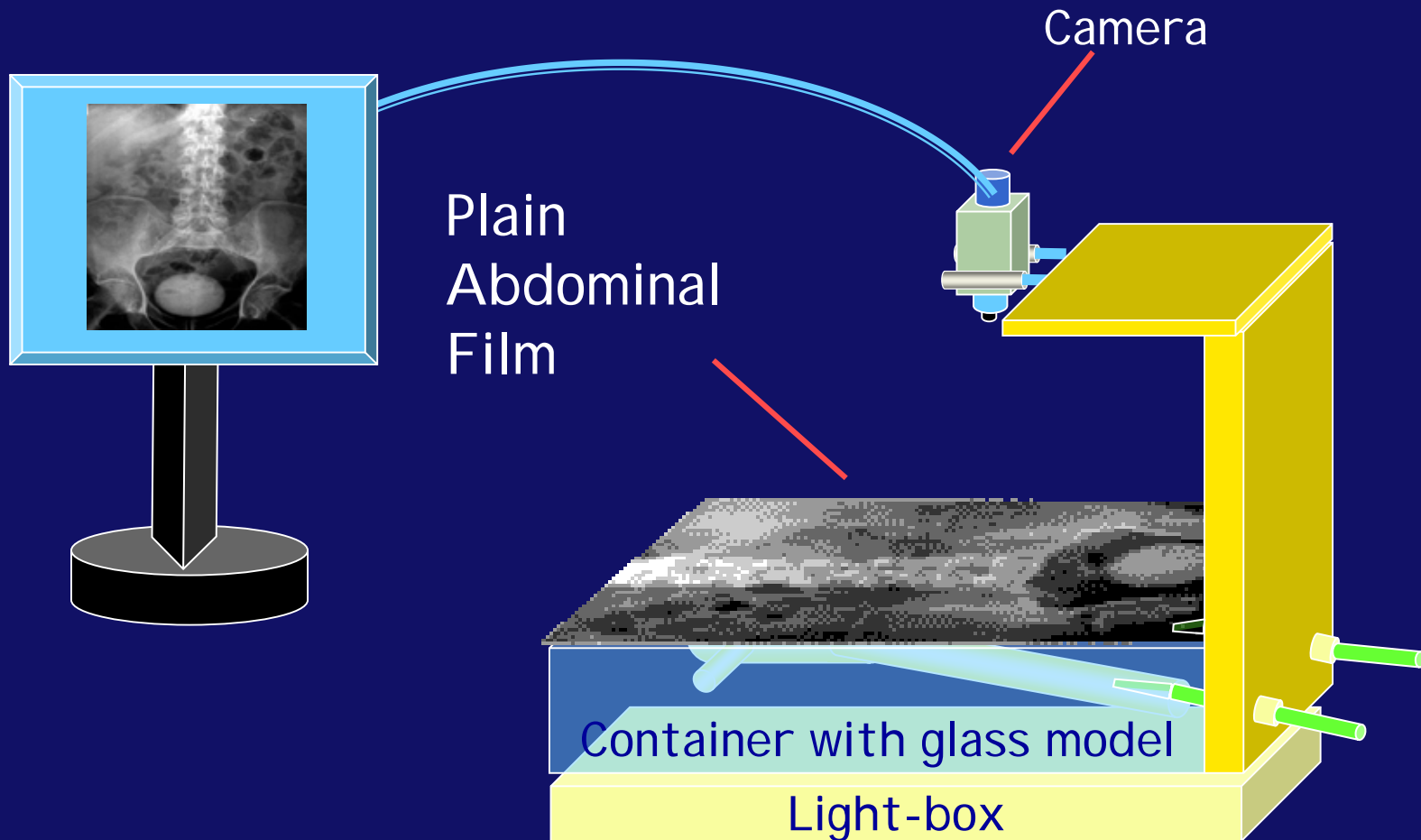
'Easy'
Stenosis



Angulated
Side

'Difficult'
Stenosis

STRESS-machine: schematic drawing





To Reduce Subjectiveness



- Two assessors at each station
- Rotation of candidates around stations (In total 12 different examiners for the oral section)
- Clinical cases/ academic paper / overall discussed prior to start of exam
- Linguistic help



Quality Assurance



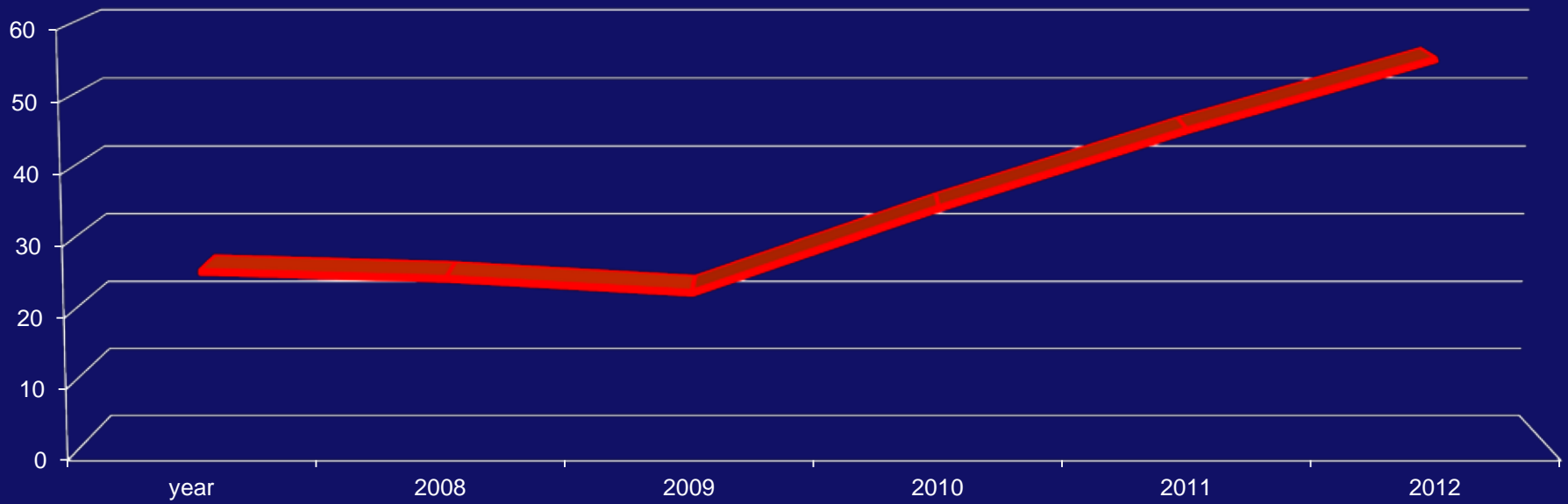
- FEBVS has been Quality assured by an external educationalist
- Each exam has a number of senior examiners who act as assessors of the examiners
- Syllabus on the web.



FEBVS Candidates



Number of Candidates





EBVS Examinations since 1996



Year and place		candidates	pass rate
1996	Venice	15	13 (86%)
1997	Lisbon	20	16 (80%)
1998	Paris	16	13 (81%)
1999	Copenhagen	13	13 (100%)
2000	London	17	12 (71%)
2001	Lucerne	26	17 (65%)
2002	Istanbul	24	17 (71%)
2003	Dublin	14	12 (86%)
2004	Innsbruck	20	17 (85%)
2005	Helsinki	29	24 (83%)
2006	Prague	26	23 (88%)
2007	Madrid	33	27 (82%)
2008	Nice	25	21 (84%)
2009	Oslo	24	18 (75%)
2010	Amsterdam	22	15 (68%)
2011	Athens	34	19 (56%)
2012	Maastricht/Bologna	45	38 (84%)
2013	Maastricht/Budapest	55	46 (84%)
2014	Maastricht/Stockholm	55	45 (82%)
		513	406 (79%)



What's needed



1. Promote the FEBVS as the speciality examination in countries where such an examination is not required yet
2. Increase the participation of examiners from countries which adopt the FEBVS as their exit examination
3. Improve examiner training, include equality and diversity etc
4. Institute regular statistical assessment of the exam Cronbach alpha (measure of reliability). (Score > 0.9)
5. Continue the development of the European Vascular Curriculum.



Porto 2015





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