EDITORIAL

European training requirements in vascular surgery

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The Section of Vascular Surgery became independent and separate within the UEMS in 2004, with the main objective defined as "to guarantee the highest standards of care in the field of the Vascular Surgery in the countries of the EU, by ensuring that the training of the specialist doctor is raised to the highest possible level".1 This goal follows the UEMS conviction that the quality of medical care and expertise is directly linked to the quality of training provided to the medical professionals. Consequently, the UEMS Section and Board of Vascular Surgery committed itself to the improvement of vascular surgical training in Europe through the development of European Standards, so that, regardless of where the vascular surgeons are trained, they would have at least the same core competencies. In this context, the UEMS Section and Board of Vascular Surgery has recently published a guideline document entitled "European training requirements in vascular surgery" focusing on the required competencies of a vascular surgeon as well as on the suggested ways to document and assess them.

The content of training is divided into three main areas: theoretical knowledge, practical skills and professional attitudes. Theoretical knowledge should cover the whole spectrum of arterial, venous and lymphatic diseases, including prevention, diagnosis and treatment. This is a traditional requirement and there is nothing unexpected in it. In the acquisition of practical skills, however, there has been a paradigm shift. The guideline document does not describe a minimum number of procedures that a vascular trainee should have performed before being considered as a proficient vascular surgeon. Instead, the focus of training is moved from timeand process-based to competency-based training. The deci-

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Department of Vascular Surgery, Medical School National and Kapodistrian University of Athens Attikon University Hospital, Athens, Greece Rimini 1, Haidari. 12462, Athens E-mail: kakisis@med.uoa.gr doi: 10.59037/hjves.v5i1.23 ISSN 2732-7175 / 2023 Hellenic Society of Vascular and Endovascular Surgery Published by Rotonda Publications All rights reserved. https://www.heljves.com sive factor is what the trainee is able to do, not the number of procedures he/she has observed or performed. In other words, the goal of training is the mastery of skills that allows for unsupervised practice, not the achievement of minimum numbers. In any case, technical skills are divided into basic, intermediate and advanced and should be acquired through observation, performance with assistance and performance without assistance. The whole training process is continuously monitored to verify that the achieved level of competency meets the expectations.

Professionalism is another integral part of the vascular trainees' curriculum, often underestimated by both trainers and trainees. It is recommended that the curriculum includes basic knowledge of scientific methodology and principles of clinical research, ethics, patient rights and protection of privacy, national and European legislation related to health care and legal rules of employment and working conditions. Commitment to patients and society, appropriate professional behaviors and commitment to excellence in all aspects of practice should be taught and monitored through patient and staff feedback.

The training period in vascular surgery should be sufficient to ensure that the trainee has reached the required level of competency. The minimum duration of training is recommended to be 5 years, whereas a duration of up to 7 years may be considered appropriate by national authorities. The first two years should be focused on developing basic patient care and technical skills, whereas the following years should be focused in vascular and endovascular surgery. Training in vascular ultrasound is a sine gua non in contemporary vascular surgery and should be incorporated in the curriculum of training, either as a separate educational section or a daily/ weekly activity. Inclusion of simulators, wet labs and vascular research activities is also encouraged. The theoretical part should be covered by an education program consisting of lectures (including visiting speakers), clinical case presentations, conferences (including the National Society and the European Society for Vascular Surgery annual meeting), journal clubs, mortality and morbidity meetings, research meetings, teaching in ethics, administration, management and economics, as well as radiation protection courses.

During the training, vascular surgery trainees should re-

ceive continuous feedback and evaluation. The "entrustable professional activities" (EPAs) for vascular surgery is a workplace assessment tool that could be used on a regular base to provide an immediate and structured feedback. All operations and interventions should also be documented in a logbook. The FEBVS Exam (Fellow of the European Board of Vascular Surgery) could serve as a comprehensive final assessment, during which the candidates will have to discuss a scientific paper, discuss and evaluate clinical cases, explain clinical situations and perform practical work on a model or simulator (skills assessment).

The other pole of a training program is the trainer, who is expected to create a positive learning climate, show professional attitude towards residents, communicate learning goals, evaluate the residents and provide feedback to them. Trainers must be positive role models demonstrating good medical practice. They are expected to maintain knowledge and skills on an ongoing basis through continuing professional development. In that respect, the creation of "Training the trainers" programs is highly recommended.

The teaching institution must possess all the necessary infrastructure to provide training in vascular surgery, including a diverse and sufficiently large inpatient and outpatient service, adequate teaching staff, operating theatres, angio-(hybrid) suites, appropriate equipment and other (theoretical) learning facilities. The number of training positions must be in accordance with the resources of the training center and the manpower planning projection of each EU national state. Importantly, training institutions should be recognized and accredited by national authorities. Internal and external auditing, regular reports and transparency of programmed training through the publication of details of the training program are essential parts of quality management within training institutions.

The UEMS Section and Board of Vascular Surgery does not have the will or the means to enforce these requirements. However, according to the Merriam-Webster dictionary, the word "requirement" is defined as "something essential to the existence or occurrence of something else". In light of this, we should all embrace these requirements and try to fulfil them in our everyday practice as they are "essential to the existence" of a high level and harmonized within European countries training program for the next generation of vascular surgery specialists.

REFERENCES

 Mansilha A, Viddal B, Krievins D, McLain D, Petkov D, Adili F, DE Borst G, Oskinis G, Fourneau I, Cvjetko I, Kakisis J, Maeso J, Scott J, Tijunaitis K, Cassar K, Velicka L, Gasparini M, Widmer M, Gargiulo M, Ionac M, Chakfé N, Staffa R, Suominen V, Szeberin Z. European training requirements in vascular surgery. Int Angiol 2022;41:91-104. doi: 10.23736/S0392-9590.22.04841-6.mised medical therapy alone in patients with symptomatic and asymptomatic carotid stenosis at low to intermediate risk of stroke. Trials. 2022;23(1):606.