EuroIntervention

Training in interventional cardiology in Europe: how to move from chaos to rational common programmes?

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The last years have seen an exponential growth of Interventional Cardiology in Europe. The driving factors were the use of stents and more recently drug eluting stents for percutaneous treatment of complex, long and multiple lesions previously reserved only to surgery, the routine use of primary angioplasty in acute myocardial infarction and of rapid referral to invasive evaluation of patients with unstable syndromes and the trend to tackle non coronary disease such as carotid, renal, iliac, femoropopliteal stenoses. It was unavoidable that the training schemes designed when interventional cardiology was in its infancy did not cope with this pace. The undesirable consequence was that the increased demand for more interventional procedures and centres offering 24 hour/7 day emergency service outweighed the number of properly trained new Specialists available. Interventional Cardiology suffers now a problem mirror-like and opposite to cardiovascular surgery: training of new cardiovascular surgeons is tightly regulated and well controlled and ensures that only properly trained specialists are allowed to operate but the shrinking indications for surgery threaten some of these new trainees with bleak expectations of work opportunities. Conversely, in interventional cardiology the drive to have more operators and the absence of regulated modalities of training may lead to an outburst of self recognised specialists with a non evidence-based approach to the procedural indications and an incomplete knowledge of techniques.

The ability to perform diagnostic coronary angiography and right and left cardiac catheterisation is part of the general training for Cardiologists in most European countries with a minimum number of procedures often indicated in the curriculum of trainees in cardiology. The general training in cardiology, however, rarely offers more than the possibility to assist a more senior operator to perform angioplasty procedures. Very few countries offer a structured programme of advanced training and the absence of regulations to determine the level of experience and knowledge in this field has allowed any new Cardiology Specialist to start or be involved in interventional programmes, often in small hospitals with no supervision.

The importance of a standardisation of the modalities of training across Europe is obvious now that free movement of Specialists is one of the main achievements of the European Community. In two Business Meetings of the ESC Working Group on Interventional Cardiology (Vienna 2003 and Munich 2004) a high priority was assigned to the coordination of the national efforts and the definition of minimal standards to be applied to the various realities present across Europe.

After 2 years working to achieve this goal let's summarise some points of general agreement on the directions to follow:

1. The European Society of Cardiology and its Working Groups and Associations are the ideal subjects to propose and define the optimal content and modalities of training in cardiology and its subspecialties.
2. The ESC Working Group on Interventional Cardiology must prepare a Curriculum and Syllabus of Training in Interventional Cardiology, meeting the criteria indicated by the Task Force on Subspecialty Accreditation of the European Society of Cardiology and in close cooperation with the national groups of Interventional Cardiology.
3. The European Society of Cardiology and its Working Groups and Associations must lobby to have these guidelines endorsed at a European level in cooperation with the Union of the European Medical Specialists.
4. Decisions concerning training in Cardiology and its Subspecialties can be enforced only by National Governments after effective lobbying of the National Societies of Cardiology and Groups of Interventional Cardiology through the National Colleges of Physicians. The use of homogeneous training goals, study topics and assessment methods, meeting minimal European standards, will ensure credibility to the different national programmes.
5. The ESC Working Group on Interventional Cardiology should carry out periodical evaluations of candidates willing to become Specialists in Interventional Cardiology, both reviewing their Curriculum and certified procedural log book and organising an

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examination to test their knowledge. This experience can stimulate the development of national exams and can offer an opportunity for cardiologists working in countries still without a well defined training programme and certification method.

6. The ESC Working Group on Interventional Cardiology must promote Interventional Training Fellowships structured along the lines indicated in the Curriculum and hosted in prestigious European centres committed to full training of the candidates. For the first time in 2006 an ESC Interventional Cardiology Fellowship Programme will begin, as announced by Professor Petr Widimsky in the 2005 ESC Congress in Stockholm, allowed by the generous contributions of EuroPCR and of various device and pharmaceutical companies.

The new journal "EuroIntervention" has a great potential to promote the concept of Subspecialty training in Interventional Cardiology and to help avoiding that the process of national recognition of Subspecialties turns into full anarchy with leading countries tightly controlling training of Interventional Cardiologists and other countries with more relaxed attitudes, endangering the generally accepted principle of free circulation of specialists. A Section on Training in Cardiology in this journal should be started addressing the following topics in the coming issues:

- Present situation of training in Interventional Cardiology in different European Countries
- Lessons from the American Board of Interventional Cardiology programme
- Common standards recommended by the European Board for Subspecialty Committee Coordination Task Force and the experience of other Subspecialty Groups (Echocardiography, Electrophysiology and Pacing, Nuclear Cardiology/Non invasive cardiac imaging)
- Learning goals and assessment methods. Focus on professional operative skills
- Virtual reality tools in training and assessment

These articles should sparkle a debate helpful to finalise the proposals of a European Curriculum and Syllabus of Interventional Cardiology able to gain widespread acceptance in the different National Societies. Practical important decisions such as the duration of training, its relationship with the training in general cardiology (part of an advanced training within the Curriculum of Cardiology or separate, offered only to full Cardiology Specialists), total number and type of interventions to be certified, characteristics of the training centres, need of training in peripheral angioplasty are controversial issues. Only a large debate and a general consensus can ensure that the right decisions are taken and endorsed at a national level throughout Europe. EuroIntervention can become the important Forum of continuous discussion on Interventional Training which is still lacking in Europe and, besides the invited contributions listed above, should welcome manuscripts in the field from individuals, groups and societies.