The case for the speciality of Medical Angiology

European Working Group on Medical Angiology

Incidence and prevalence of peripheral arterial and venous diseases, as well as arteriosclerotic lesions of the extracranial brain feeding vessels, are increasing dramatically.

In German speaking countries, for instance, the prevalence of peripheral arterial disease – analogous to the Basel-Study – is 2.0% (age 35–44), 6.1% (age 45–54), 11% (age 55–64).

Data for Italy are 15%, for France 28%. In Switzerland the 5 years incidence in males aged 35 to 64 is estimated at 11% (Basel-Study).

As to further development, the Institute of Social Medicine at the University of Lübeck has calculated that the incidence of peripheral arterial occlusive disease will increase by 45% (males) and 14% (females) by the year 2030. In this study, peripheral arterial diseases were separated from cardiovascular morbidity for the first time.

The prevalence of peripheral venous diseases has been estimated for a Swiss population between 22% (at age 20) and 75% (at age 60). Chronic venous incompetence of clinical relevance accounts for about 22% and venous ulcers for about 2%. In Germany, the mean prevalence is estimated at 30% (in addition to the approx 1000000 cases of post-thrombotic syndrome), in Austria at 28%, at 20% in Sweden and again at 20% in Italy.

The prevalence of cerebral vascular diseases is 430–480 cases per 100000 inhabitants according to population studies in England and Wales, in Norway and in some areas of Austria. Even higher values were reported in the Copenhagen-Study, in Rochester and in Finland.

90000 deaths per year are due to ischemic diseases of the carotid and/or vertebral arterial system in Germany. The incidence of transient ischemic attacks in Sweden is prospectively 33–45 cases per year among 100000 inhabitants. The five year incidence of transient cerebral ischemic attacks in 20–54 year-olds in Tromsoe was 2.5 per 1000 inhabitants (Tromsoe-Study).

What are the requisites for the establishment of a new medical speciality?

There are three fundamental requisites: I) a high prevalence of the disorders specific to the specialty; II) a major social impact in terms of prognosis and influence on the quality of life and independence of the individuals involved; III) advances in understanding the diagnosis and therapy of the disorders from which future development is anticipated.

Angiology (Medical Angiology/Vascular Medicine) meets the general criteria above for recognition as an independent medical specialty in all European Countries for the following reasons:

1) Vascular diseases are one of the most rapidly developing health problems in all Europe. A high prevalence of symptomatic vascular disease in the population at large has been estimated and the incidence increases considerably with age. Furthermore, many symptomless subjects, who are nevertheless at risk, go undetected without appropriate epidemiological studies. Moreover, the considerable extent to which these diseases contribute to so-called «cardiovascular» mortality, the primary cause of death in industrialized countries, is well accepted.

2) The social cost of vascular diseases is enormous in terms of loss of, or decrease in, work potential and personal independence, to which is

often added the need for daily treatment, as well as diagnostic and clinical follow-up and rehabilitation. The personal tragedy of losing a limb or suffering from paralysis cannot be overestimated. The lack of a medical speciality targetted specifically at these patients has prevented the development of services capable of adequately meeting their needs.

3) Vascular diseases certainly fulfill the third requirement. Clinical research centers, often lacking official status, have been in existence for many years and are still developing within the framework of internal medicine.

There has been considerable development in diagnostic techniques in the field of the study of macro and microcirculation, as well as the progress in the field of vascular biology. The development of interventional therapeutic procedures, new drugs and clinical trial techniques represent further advances from which benefits may be anticipated.

The situation in Angiology (Medical Angiology/Vascular Medicine) can thus be equated to that of other specialities) that however benefit from their official status. Such status for medical angiology/vascular medicine would provide coordination and enable the development of existing Centers and the foundation of new ones with the aim of applying the many advances in this area to clinical practice.

What features should govern the development of a new speciality of angiology?

There are arguably three principles:

1) Preparatory general medical training

Medicine has witnessed a huge advance in knowledge, thanks to the growing specialization of research scientists and physicians. The potential drawbacks which are unavoidable, due to the amount of knowledge required by each facet of medicine, are both the parceling of knowledge and the specialist's frequent «loss» of the «global picture». This is precisely why it is essential to defend the concept that every specialist medical residency program should ideally be preceded by general medical preparation.

The way that this is achieved will vary from country to country.

2) A European perspective

Knowledge development cannot be «domestic» even though the individual demographic features must obviously be taken into consideration.

Likewise, a modern vision of teaching cannot be «national». Vascular diseases are major causes of morbility and mortality in all European member states, yet opportunities for training and treatment vary widely.

For these reasons it is felt that the new specialty of medical angiology/vascular medicine should have a European perspective and efforts to obtain the official recognition of the speciality will proceed at the European level. In practice this could mean program coordination, teacher cooperation and the possibility of student exchanges, leading to a uniform preparation of specialists.

3) Cooperation with other specialities

Today it is impossible to work acceptably without a «collaborative» vision of problems. Although medical angiology obviously requires its own identity in line with the other specialities, at the same time we recognize the usefulness of close cooperation with all other specialists.

Proposals

1) *Speciality of Medical Angiology*

a) It is proposed that the speciality of Medical Angiology should be established and that efforts should be made at a national and international level to achieve this objective.

b) The clinical speciality of Medical Angiology, will encompass all diseases of the vascular system (arterial, venous and lymphatic) irrespective of the organ involved.

c) The speciality of Medical Angiology will be responsible for:

- Medical clinical mangement (prevention – diagnosis and medical treatment) of vascular disease.
- The conduct of research into the nature of vascular diseases, their characterisation, and treatment.
- Developing and administering undegraduate and postgraduate training programmes in the

subjects in accordance with European and local national guidelines.
- The establishment of systems for auditing the delivery of care for vascular diseases and the outcome in terms of defined end-points.

2) *Departments and Services of Medical Angiology*

Medical angiology also requires the recognition and the development of independent research and clinical units.

The autonomy of such must be assured to permit their adequate development. This autonomy will be implemented concretely and diversely throughout Europe (along the lines of other specialities).

An eventual target should be 1–2 practising angiologist/vascular physician for every 100000 population.

3) *European Working Group on Medical Angiology*

A European Working Group on Medical Angiology was established to further study the problem and to define the propositions outlined above.

a) To achieve the goal of speciality recognition for Angiology/Vascular Medicine in all Europe.

- Lobby the standing committee of doctors of the European Commission.
- Undertake national local initiatives.
- Raise the profile of the «speciality» by ensuring research is of the highest standard.

b) Create a European Fellowship in Angiology (Medical Angiology/Vascular Medicine), recognized by the IUA that results in a official award (European Fellowship). The award would be made following a common high standard postgraduate programme of training in the subject (content and nature to be defined in a few months).

European Working Group on Medical Angiology

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