The incorporation of pediatric neurosurgery into the European health care system

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Prologue

Pediatric neurosurgery is now implicitly recognized as a sub-speciality within neurosurgery, the degree to which it is formally recognized varying from one country to another. In some parts of the world, China for example, the specialization consists in applying general neurosurgical principles and techniques to children, scaling down instruments and movements. In others, such as the Czech Republic, there is a Pediatric Medical School (Motul) where pediatric neurosurgery is studied as part of the pediatric surgery curriculum (and the clinical unit has 40 beds and independent diagnostic and surgical facilities as backup). There are international and national pediatric neurosurgery societies; there are groups and clubs. There is an academic community (of international leaders)! Text books, year books, journals, and newsletters are devoted entirely to this sub-specialty; no fewer than six major meetings and ten local gatherings, two international courses and four seminars of one type or another are conducted each year.

Over the past 20 years, organized neurosurgery has continuously encouraged development of the art and techniques of pediatric neurosurgery, explicitly and implicitly, by incorporating educational seminars, professional sections, and scientific programs into its overall activities. Organized neurosurgery, however, has not considered it in (our) best interests to recognize pediatric neurosurgery as an independent specialty in its own right (Bulletin ABNS, 1993). In the opinion of this author, this is good, since a sub-specialty such as ours could not long survive in such a position: scientific concepts, technical skills, instrumentation, and manpower flow from general neurosurgery into pediatric neurosurgery and not vice versa. Also, pediatric neurosurgical diseases result more directly from sociological, socio-economic, and environmental conditions, so that they vary widely from one part of the world to another and, consequently, respond very quickly to changes in hygiene, mores, and laws.

However, those of us who are working in organized neurosurgery are very much aware of the irresistible and universal movement toward sub-specialization within neurosurgery, and continue to encourage this both professionally and academically: it is a natural unfolding and growth process occurring simultaneously in all disciplines within the medical sciences as a result of ever more conceptual and technical advances [6]. As we, physicians and surgeons, compete with one another for positions and patients - the capitalist doctrine - we steadily incorporate new scientific principles, new techniques, new methodologies into our professional activities, and we do this with steadily diminishing pain and discomfort to the patient and dramatic reductions in morbidity and mortality. Pediatric neurosurgery and stereotaxic neurosurgery are two of the "oldest" and most advanced activities specific to neurosurgery that continue to attract the full attention and time of enough practicing neurosurgeons to have obliged them to organize specific professional societies so that by the very example of their work they can set up specific criteria allowing them to be identified and evaluated. As a body, they have also confronted the organized neurosurgical establishment to ask for formal recognition of their work and the professional qualities they embody [7]. The most reasonable way of accomplishing this in a manner that would strengthen neurosurgery and permanently prevent its fragmentation, is by issuing certificates of special competence [5]. The neurosurgical societies of the more highly industrialized countries of the world are now within a hair's breadth of implementing such a system. This is most desirable, and should be strongly supported.
The geopolitical realities of market-induced restructuring of micro- and macro-cultures (European Community, North American Free Trade Agreement, General Agreement on Trade and Tariffs, etc.) have already incorporated the health-care system into the evolving socio-economic frameworks. In fact, health care is now targeted to entire nations, and no longer to specific economic, disease, age, or social categories. It is being molded to fit entire populations; individuals or groups will soon not need, or be able, to seek out specialists or to shuttle between generalists in one geomedical area and specialists in another.

Multifactional “centralization authorities” will be responsible for standardizing uniform hospital systems, access to medical care, and flow of health-care providers across national, and regional, borders. They will also assume responsibility for assuring uniformity of education and of minimal professional standards, physician-to-population ratios, and identification and distribution of (special care) centers. The physician, whatever his or her specialty, will be integrated into the health-care units of his or her geo-political/socio-economic system. To a certain extent, this is already a reality in Scandinavia, and it works; in Italy, it is theoretical, and it does not work. In Europe, various “specializations” have already been identified, codified, incorporated into the European Community structure “Union Européenne des Médecins Spécialistes” (U.E.M.S.).

We are here today to identify the means by which pediatric neurosurgery might be fitted into its proper role in the European Community. Accordingly, we come together, as pediatric neurosurgeons, with the responsible officers of the European Association of Neurosurgical Societies and the European Society for Pediatric Neurosurgery, representatives of the U.E.M.S., and selected experts in pediatric neurology, nursing care, etc. Our goal is to prepare organized pediatric neurosurgery in Europe so that it may relate, directly and professionally on an inter-disciplinary plane, with other specialists and within the structure of U.E.M.S. as a sub-section of Neurosurgery.

To assist us, to facilitate and direct our efforts both to establish the guidelines for incorporating pediatric neurosurgery into the European health care system and to begin working with one another, we come together as a relatively heterogeneous group of specialists. This is deliberate, as the intention is for all specialists, disciplines, organizations, and perspectives focusing on neurosurgery, the pediatric age group, and Europe as a political and health-care unit to be represented. Since this workshop is concerned with the work of professionals, matters relevant to medical school curricula and qualification have been eschewed. The emphasis is on the identity of pediatric neurosurgery, multidisciplinary approaches to child care, and the inter-relationships between general and pediatric neurosurgery societies. Supportive perspectives regarding neurosurgery training courses, adult and pediatric, put into relief the significant parameters that render each area specific and particular.

Looking now directly into the world of pediatric neurosurgery, at those elements that are peculiar to it and make it a readily identifiable sub-specialty, the first and most obvious of all is the very nature of the child [1]. The child requires special diagnostic and human resources, which must include the family, education, psychosocial development [2]. Growth, physical and cultural, is ontologically reproduced repeatedly in a culture’s life-cycle by the children, healthy and sick, maturing within it. Therefore, the family, neuropsychiatrics, multidisciplinary interactions, and sociology form the nucleus upon which the treatment of surgical diseases of the nervous system in childhood must be based. The specific instrumentarium and general guidelines regarding its use are developed within adult neurosurgery and neuroradiology. Consequently, pediatric neurosurgeons practice their art, which is neurosurgical, with the brush and colors of neurosurgery upon the canvas of pediatrics and the family. Now, we must get down to plotting the course pediatric neurosurgery should take to become fully incorporated into the European health-care system in the best possible way – as a sub-specialty within the discipline of neurosurgery. It would be unnatural and counterproductive for it to be regarded as a branch of pediatrics.

**Evolution of pediatric neurosurgery**

Though neurosurgeons have been operating successfully and brilliantly on children and teaching the theory and practice of their art [3] since 1883, their efforts and dedication cannot be considered the origin of pediatric neurosurgery as a sub-specialty.

The point at which our sub-specialty acquired a separate identity can be clearly recognized: it was in 1972, when neurosurgeons who limited themselves more or less exclusively to treating children got together to form a scientific society dedicated entirely to promoting the theory and practice of pediatric neurosurgery, the International Society for Pediatric Neurosurgery (ISPN).

Pediatric neuroradiology and pediatric neurosurgery together made a significant impact, potentiating one another and giving a clear message: children are so very different from adults that separate specialization arises spontaneously [4].

Very late in the 1960s the Europeans identified a need to press for recognition of pediatric neurosurgery, forming the ESPN (the European Society for Pediatric Neurosurgery). Their first scientific meeting was held in 1966 in Vienna (Krause), and the second in 1968 in Versailles (Rougerie). This step provided those who had been captivated by specific neurosurgical problems of childhood...