

# **St.-PETERSBURG: TRADITIONS AND PROSPECTS OF INTERNATIONAL SYMPOSIA**

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A head is known to be a rather obscure object which is not liable to study. Nevertheless, the last two centuries were characterized by tenacious efforts of a numerous clan of clinicians, physiologists, morphologists who tried to discover fundamental laws of the brain and its functioning, clinical manifestations of its diseases and their diagnosis. Marked divergence of scientific schools studying extremely particular details became a tradition of the second half of the slipping away century. Thus, specialists “suffering from the gumboil”, i.e. their own significance, arrived at complete misunderstanding of each other as they spoke different languages or, to be more precise, languages of different schools studying one and the same object. Integration of clinicians-neurologists and specialists who investigated mainly functional aspects of the brain activity in normal and pathologic conditions became an antipode of this situation. In a certain sense, this idea laid down the foundations of a series of scientific symposia held in the 1990s first at the Institute of Neurology in Moscow (1992) and then at the Chair of Neurosurgery of the Russian Medicomilitary Academy.

The first working conferences organized with direct financial and technical assistance of Electric Medical Systems (Austria) and Dr. Johann Ortner in person were aimed mainly at acquaintance of broad circles of the home neurological community with up-to-date achievements in the field of equipment for clinical neurophysiology supplied by the Nicolet concern and its satellites, in particular the Eden Medical Electronics firm. These meetings having been planned initially as advertising and educational events grew into a unique forum of representatives of neurosciences unwittingly for their organizers and everybody got a chance to take the floor and to contact different specialists without any limitations. Training seminars, lectures and practical studies conducted in parallel with main sessions became a school of clinical neurophysiology and dopplerography for hundreds of specialists from Russia and the former Soviet countries. The goal of the present report is to acquaint neurosurgeons with the events of the past and to outline prospects of our symposia.

The International Symposium on Transcranial Dopplerography and Intraoperative Monitoring was held on the Neva banks at the end of June 1993 for the first time. Three days of fruitful work with participation of famous foreign and home scientists were devoted to discussion of such problems as clinical dopplerographic diagnosis, intraoperative monitoring during cardiovascular and neurosurgical interventions, monitoring in an intensive care unit, diagnosis of the brain death. There were 4 plenary sessions with 29 oral reports in total. Training in the field of ultrasonic diagnosis based on the EME-Nicolet dopplerographic systems, neurophysiological diagnosis and monitoring was carried out in parallel. Heads and leading managers of companies-manufactures of equipment representing the Symposium organizers demonstrated their latest achievements which, to some extent, turned out to be a revelation for the majority of its participants. In particular, the seminars became the first possibility to operate both manufactured systems and prospective (for that time) prototypes of ultrasonic apparatus. Lectures by Prof. F. Riis (Germany) and Prof. R.J. Akerstaff (Netherlands) produced an unforgettable impression on the audience and greatly effected further research on intraoperative monitoring during interventions on carotid arteries. The organizational framework of the second Symposium, which became standard later,

consisted of five principal blocks: plenary sessions, section sessions, round-table discussions within sections, lectures and seminars, advertising presentations. The extremely rich and diverse scientific program aroused interest of the participants from the very first and up to the last day. Besides, the Symposia was "a training ground" for social events which became a tradition too. They included a trip to Veliky Novgorod, a white-night cruise up and down the Neva by cutters, personal contacts and friendly chat in informal environment. It was for the first time that the Symposium Transactions (more than 100 pages) were published both in Russian and in English. Thus, the foreign participants and their colleagues were able to get acquainted with the state of the art in Russian clinical neurophysiology of today [1].

The third and last symposium devoted to clinical aspects of diagnostic methods and their use in clinical practice was held in two years (this interval between meetings has become a tradition too). There was little difference in the list of topics touched upon during the first and second symposia. Just as before clinical dopplerography, neurophysiology and intraoperative monitoring were the main subjects included into the program for discussion. The number of reports was equal to 70. The floor was taken by almost all leading home specialists: professors Stulin I.D., Kazanchyan P.O., Kupeberg E.B., Dzhibladze D.N., Nikitin Yu.M., Mirzoyan R.S., Gnezditsky V.V., Stykan O.A., etc. This chance was given to young scientists from different regions of the country as well. The reports of specialists from the leading scientific centers of Saint Petersburg and Moscow were notable for the level of their preparation, style and scientific-practical importance. The greatest interest was aroused by the reports made by Lelyuk V.G. (Moscow), Lytaev S.A., Voznyuk I.A., Shchegolev A.V. (Saint Petersburg), Kravets L.Ya. (Nizhny Novgorod). The emphasis was laid on such aspects of vascular neurology and neurosurgery as ultrasonic diagnosis of a functional state of cerebral circulation. Thus, cerebral ischemia happened to become a dominant problem among other topics. As for foreign participants from European countries and the USA they were represented by such famous specialists in ultrasonic diagnosis and intraoperative monitoring as Prof. Guerit J.M., doctors Giller C.A., Owen J.H., Alexandrov A, etc. Transactions of the Symposium (more than 200 pages) with full reports made at it were published both in Russian and English to acquaint broad circles of specialists, including those from foreign countries, with its results [2].

Taking into account the fact that there were three symposia (1992, 1993, 1995) on methods of neurophysiologic testing and a great interest in problems of diagnosis of cerebral ischemia watched during the last meeting it was decided to devote the fourth symposium to cerebral ischemia being one of the most urgent problems not only in neurosurgery and neurology but also in medicine of critical states. The topic change did not scare away permanent participants but on the contrary increased their number up to 500 men. Constantly growing popularity of periodic scientific meetings made companies-manufactures of neurophysiologic equipment organize the "unprecedented landing" of leading specialists from America and other countries headed by Prof. Merill Spencer (USA), the patriarch of ultrasonic diagnosis and director of the Institute of Applied and Experimental Physiology. Professors Yatsy F., Krieger D., Kirkpatrick P,J,m Edmonds H.L., Guerit J.M. and doctors Harer C., Dobson D.T., Alekxandrov A. contributed much to the work of the Symposium. Its subject-matter differed greatly from those of preceding forums. The problems under discussion included chronic insufficiency of cerebral circulation, surgical prevention of ischemic stroke, cerebral ischemia in intracranial hemorrhages, ischemic stroke, neurophysiologic monitoring in intensive care in neurology. There were postal presentations on each topic. In contrast to the previous symposia it were home scientists and practical physicians who set the fashion in discussions. As for foreign colleagues their participation was mainly of an

educational character. A peculiar feature of the Symposium was a great number of vascular neurosurgeons and experts in neuroresuscitation present at it. Close cooperation of specialists working in the same field allowed to draw nearer their views on such problems as diagnosis and treatment of cerebral ischemia in posthemorrhagic constrictive-stenotic arteriopathy, surgical treatment of chronic insufficiency of cerebral circulation, etc. Despite some "bias" towards surgical problems the Symposium did not lose its attraction for neurologists, neurophysiologists, interventionists and other specialists due to refusal from savouring peculiarities of the method in favour of discussion of its clinical application in a specific pathophysiological situation with the purpose of making decision on tactics of treatment including surgical one. The Symposium Transactions (more than 300 pages) published in Russian and English by tradition contained 145 papers of full value [3]. More than a half of them was presented in the form of reports at plenary and section sessions. The Symposium was characterized by active practical training of skills necessary for operating main neurophysiologic apparatus. More than 200 specialists took part in workshops on various problems of clinical neurophysiology.

Unfortunately, we suffered certain losses. The EMS firm (Austria) managed by Ortner J. which was our sponsor of many years and one of the organizers of the symposia stopped its existence because of some financial problems and had no possibility to realize its profound scientific-practical program on the territory of Russia any longer. As a result, responsibility for organization of the next fifth symposium (1999) was put on the shoulders of the staff of the Chair of Neurosurgery of the Russian Medicomilitary Academy. Besides, the Polenov Neurosurgical Institute took an active part in the process of preparation too. In spite of objective difficulties and thanks to business connections with representatives of such firms as Nicolet Biomedical and Karl Storz the Organizing Committee succeeded not only in holding the Symposium but also in "developing its muscles." The program of the scientific forum underwent some modification and widening in accordance with directions of the Association of Neurosurgeons of Russia being its official organizer for the first time. Study of minimum invasive methods of diagnosis and treatment and its efficiency in revealing and correction of brain injuries of various etiology was regarded as a problem of paramount importance. A variety of problems concealing themselves behind the term "brain injuries" allowed to increase a number of participants by attracting specialists in X-ray diagnosis, neurovascular surgery, traumatology, oncology, functional neurosurgery. All the topics were divided into two big information blocks: minimum invasive diagnosis and minimum invasive surgery. The first block was a natural continuation of subject-matters discussed at all preceding symposia and considered problems of neurophysiology, minimum invasive intrascopy, intraoperative monitoring. As for the second block, it dealt with problems of endovideosurgery, microneurosurgery, intravascular neurosurgery, stereotaxic neurosurgery and modern methods of neurosurgical correction. The total number of reports was equal to 92.

In contrast to the previous meetings the most important part was played by home scientific schools. The Symposium was held against the background of the Plenary session of the Administrative Board of the above-mentioned Association. Thus, one could see the leaders of the Russian neurosurgical service and Konovalov A.N., academician of the Russian Academy of Medical Sciences, among its participants. A high level of reports and publications was conditioned by active participation of famous researchers from the Burdenko Research Institute of Neurosurgery, Polenov Neurosurgical Institute and the Chair of Neurosurgery of the Russian Medicomilitary Academy. The Symposium Transactions (a volume of 500 pages) became the quintessence of achievements of home clinical neurosurgery [4].

Despite financial difficulties the leaders of the Association of Neurosurgeons of Russia consider it necessary to hold such symposia during inter-congress periods with the purpose of expansion of contacts between neurosurgeons and specialists in adjacent areas. The Organizing Committee has come to the conclusion that future scientific conferences are to be concentrated on problems of clinical neurosurgery with a dominant trend defined as minimum invasive treatment-and-diagnosis neurosurgical complex. It does not exclude participation of specialists of neurophysiologic and ultrasonic diagnosis but, on the contrary, attracts their attention as the brain and its vascular system are an inexhaustible source of information and a neurosurgeon is the only specialist able to use obtained data in his surgical practice. The next sixth symposium devoted to minimum invasive neurosurgery will be held in the Medicomilitary Academy in June 2001. All information on organization of this event will be available in the present site. Stay with us!

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## References:

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3. Brain ischemia. IVth International Symposium on Transcranial Doppler and Electrophysiological Monitoring. St.-Petersburg, June 1997. / Scientific reports.-St.-Petersburg, 1995 - 384 p.
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[http://www.neuro.neva.ru/English/Issues/Articles\\_1\\_2000/sym2000.htm](http://www.neuro.neva.ru/English/Issues/Articles_1_2000/sym2000.htm)