



Neuromodulation News: Spring 2012

A Message from the President

Welcome to the spring INS newsletter with updates from the past three months. This initiative has been made more possible by the unconditional support of three of our industry supporters. I have long campaigned that the INS should act as an independent voice for neuromodulation therapies worldwide. It is my pleasure to announce that our Public Education strategy is gaining traction, with a \$25,000 <u>contribution from Boston Scientific</u> adding to the \$100,000 and \$25,000 previously received from Medtronic and St. Jude respectively. A news item below describes some of the educational materials now being developed with that support, which will benefit our members, patients and the public at large.

We are fortunate to have passionate, able and willing leaders to move the organization forward. As you may have heard, Dr. Fabián Piedimonte, president of the Argentinean Neuromodulation Society, has been elected to succeed Dr. Liong Liem in July as INS treasurer. Many thanks are due to the strong field of candidates listed in that message who were willing to serve, and to Dr. Liem for his six years of service in that role. The election process to fill the post of INS, Director at Large, left vacant by Dr. Joshua Prager fulfilling his term of office is now in motion. Candidates can be nominated by the Full Board or self-nominated from the full membership providing the process as detailed on website is carried out.

To answer a question raised on the Google group, <u>INSforum</u>, we will be preserving in the members' discussion area of our website the dialog developed about peripheral nerve stimulation during the two weeks earlier this year that Dr. Konstantin Slavin conducted as our first Expert Panel. To build upon that experience, a calendar of future panels is being formulated. Already, some members have offered to serve and suggested topical ideas. Your ideas, or offer to serve on an ensuing panel, are welcome. Please get in touch with Nancy Garcia at our Executive Office, who is the INS public education and website manager, at ngarcia@neuromodulation.com.

We hope to make an annual tradition of taking a look back at yearly activities of our chapters around the globe in our winter issue, but did not want to wait to include a few chapter news items that signify the spread of information about our field. You can track all the latest developments daily in the news stream presented on our homepage, at www.neuromodulation.com.

I will close by encouraging you to participate in upcoming activities mentioned in this newsletter, since it is your input that constitutes the tremendous value of this growing organization.

I do hope that you find some of the information presented on the website useful to your patients and referrers. The discussion groups are there to promote specific learning and discussion around certain topics. The Google group is a less formal discussion group for random idea generation, consensus seeking and a rapid source of general information from a worldwide membership.

Please use these facilities and feedback to us.

Dr Simon Thomson, MBBS, FFPMRCA President of INS **Table of Contents**

President's Message

Director-at-Large Election

2013, 2015 Congress Plans

Review: SCS in Neuropathic Pain

INS Contributes to NICE Guidance

Members: Patient Education Material to Download, Customize

INS Journal Indexing Complete

<u>Argentinean</u> <u>Chapter Launches</u> <u>Website</u>

Poland: New Chapter, Joint Conference in May 2012

Russian Chapter in Formation

Make INS Site a Start Page, See Automatic Translation Function

Facebook Appearance Update

Calendar

🔁 Back to top 🛛 🔤

Director-at-Large Election Coming

Please anticipate a call for write-in candidates for the Director-at-Large position, which has a three-year term, starting in July of 2012. The election will immediately follow a write-in nomination period, and self-nomination is permitted. All candidates will be asked to submit the following documentation to the INS Executive Office:

- 12 letters/emails of support or supporting signatures from INS members (compiled in one document)
- A curriculum vita
- A biographical sketch for the ballot, not exceeding one page
- A color photo
- A statement of intent, not exceeding 200 words



Location of 2015 Congress Announced, Call for Suggestions for 2013 Berlin Conference

Planning is actively underway for the INS 11th <u>World Congress</u>, which takes place from 8-13 June 2013 at the Estrel Hotel in Berlin. The full breadth of neuromodulation topics will be covered, including neuromodulation for pain and brain disorders. We encourage our members to suggest speakers and topics they feel would augment our congress. Please submit recommendations by the 1st of June 2012 to ins@neuromodulation.com. Meanwhile, the congress planners are happy to announce that the INS 12th <u>World Congress</u> will take place in Montreal, Quebec, Canada in 2015. We look forward to collaborating with the <u>Canadian Neuromodulation Society</u> on this event.

📤 Back to top

New! Review: Spinal Cord Stimulation for Neuropathic Pain

Although spinal cord stimulation (SCS) is perhaps the most-established member of the family of therapies known as neuromodulation, its uses continue to evolve. As defined by the International Neuromodulation Society, neuromodulation is therapeutic interaction with the central, peripheral or autonomic nervous system for therapeutic effect by means of targeted electrical stimulation or pharmacological delivery from implanted devices.

Spinal cord stimulation has been in therapeutic use for over 40 years. Importantly, the knowledge of how best to use it and the sophistication of the technology have both advanced greatly. High quality, randomised, comparative clinical studies have demonstrated unequivocal clinical and cost effectiveness in the treatment of patients with refractory neuropathic pain.¹⁻⁶ Spinal cord stimulation is also used in ischaemic pain syndromes such as chronic critical limb ischaemia, angina pectoris and in other visceral pain syndromes including chronic pancreatitis, chronic painful bladder syndrome and chronic abdominal pain.⁷ This review will be on SCS application in chronic neuropathic pain.

Neuropathic pain is pain that is generated by nervous tissue itself. It is a maladaptive response to nerve injury of either the peripheral or central nervous system. Spinal cord stimulation is used successfully in neuropathic pain of peripheral nervous system origin.⁸ In a European epidemiology study chronic pain was rated as moderate to severe in 19% of those surveyed.⁹ It is estimated that neuropathic pain affects up to 10% of the population. It is responsible for 30 to 65% of activity seen at hospital pain clinics. The natural history is poorly understood, but it is a long-term condition, usually lifelong. In severe cases the health related quality of life is rated worse than other pain conditions, heart failure and even cancer diagnoses.⁴ Typical cases include pain after nerve root injury in spinal disorders (commonly known as failed back surgery syndrome [FBSS]), post-amputation pain, other traumatic neuropathies, complex regional pain syndrome and metabolic and viral neuropathies. With the help of expert multi-modal pain medicine, some of these patients can be adequately palliated. For others, the burden of therapy is too great or ineffective, and these patients can



Abstract Deadline: Jan. 14, 2013



Now MEDLINE-Indexed!

be offered SCS.10

New developments

The commonest indication for SCS is FBSS. Neuropathic buttock and leg pain can often be successfully treated, but the associated back pain component that may have both neuropathic and nociceptive aetiology can be difficult to treat. A number of strategies have evolved in order to meet this need.

Electrode design and arrays

Spinal cord stimulation involves placing a series of electrical contacts in the epidural space overlying the dorsal columns at a vertebral level that when activated achieve as near as possible to 100% topographical coverage of the pain area of the body. The sensory homunculus of the dorsal columns has mostly sacral DC fibres in the midline with lumbar, thoracic and cervical being laid on laterally as one ascends the vertebral levels. Cerebrospinal fluid (CSF) thickness also varies, with its thickest part being in the thoracic region. Based upon the understanding generated by computer modelling of Holsheimmer, it is known that successful topography is achieved with tightly placed electrodes at not too thick a CSF layer. Current flows from cathode to anode. The shape of the current field is determined by the number of anodes. Manipulation of these as well as pulse width, frequency and amplitude allow greater recruitment and focussing of DC fibres so achieving 100% target topography.¹¹

Lead and anchor design

Leads have been developed that can be inserted through large modified epidural needles with 8 and even 16 contacts on each lead. Two, three or four leads can be inserted and connected to the same implantable pulse generator that can drive 16 or now 32 contacts. Other leads can be surgically placed through a laminotomy or flavotomy. Strong and effective anchoring devices attached to the fascia allow non-slip lead control so reducing later lead migration. Lead design has also increased their durability. Lead migration and internal breakage was a common complication in many early SCS randomised controlled trials and case series. Surgical placement has become less necessary with the new developments in lead design, anchors and implantable pulse generators. Percutaneous placement of mini-surgical paddle leads is also possible. The trend is evermore towards minimal access day-case placement with percutaneous techniques.

Rechargeable implantable pulse generator

Improvements in battery technology have allowed the development of fully rechargeable implantable pulse generators (RIPGs). A patient may spend approximately 2 hours per week charging their device with an induction coil device without interrupting their treatment. Some IPGs have no life limit such that one IPG may last 10 to 25 years depending upon usage.

The main bonus that rechargeability brings is the ability to run multiple programmes (anode and cathode arrays) simultaneously. Thus, for example, one array may allow buttock and leg coverage and another low back coverage; running both together allows 100% target topography.

The other benefit is that the patient can use their SCS as much as they want. Nonrechargeable IPGs (non-RIPGs) were used carefully by patients in order to maximise their life span. Sometimes this need to ration had a counterproductive effect on therapy outcome. Sadly, because of poor adoption of these therapies by health funding bodies patients may have to wait months for replacement non-RIPGs.

The IPGs are placed under the skin either in the abdominal or thoracic wall or upper outer buttock. The patient has a remote control unit to allow adjustments to their programmes, switching between them in order to achieve desired coverage in different postures.

One manufacturer has even incorporated accelerometers (iPhone technology) that allow the IPG to sense whether the patient is sitting or lying on their back or their side and to automatically adjust programmes that have been pre-selected in each position or activity.

Other targets and strategies for achieving better coverage

Nerve root stimulation

Nerve root stimulation can be used in isolation or in combination with SCS. There are broadly two circumstances. When there is dense deafferentation of a nerve root it can be difficult to stimulate that dermatomal area via DC stimulation alone without intense stimulation in the other surrounding dermatomal areas. The therapy can be salvaged in a cervical or thoracic area by placing lead and electrode contacts over the dorsal root entry zone. Alternatively, the leads can be passed retrograde from the mid-lumbar level down to the lumbo-sacral junction so picking up L5 and S1 roots directly. Not all will tolerate retrograde stimulation due to a narrow amplitude difference between threshold and toleration.

Peripheral field nerve stimulation

Subcutaneous stimulation of named and unnamed branches of nerves in the area of pain has been found to be therapeutic and has generated a number of interesting therapies. Occipital nerve stimulation is one such technique that will have a great future in transforming severe headache management such as migraine, cluster headache and hemicrania continua. Electrodes are threaded subcutaneously unilaterally or bilaterally at the level of the nuchal line from midline to above mastoid so picking up the branches of occipital nerves. Other peripheral nerves such as illoinguinal and genitofemoral can also be subcutaneously stimulated in this way and used in post-surgical traumatic neuropathies after groin or gynaecological surgery.

Low back pain can also be treated by placing transverse electrodes in the low back, presumably stimulating perforating cutaneous nerve branches. This can even be combined with SCS to optimise back coverage in those difficult to achieve with SCS alone. Clinically anecdotal work supports the notion that many localised but difficult to treat chronic pains may be helped by peripheral field nerve stimulation techniques. This is an area to watch as it develops.

High frequency spinal cord stimulation

A recent new development has been the discovery that high frequency stimulation between bipoles placed between T9 and T11 can achieve pain relief of the back and leg of patients who have been refractory to conventional SCS. The even more extraordinary thing is that at these high frequency levels the patient is unaware of the stimulation. Typically these frequencies are at 5000 to 10,000Hz. Conventional SCS operates at frequencies from 40 to 80Hz. Perception of stimulation is lost at about 300Hz and above. The challenges faced by many of the concepts that were used to explain SCS effects will help to further refine our understanding. To date no randomised controlled study of high frequency spinal cord stimulation (HFSCS) has been published. Further work will need to be done to understand the mechanism of action of HFSCS and its clinical effectiveness.

Dorsal root ganglion stimulation

This is another new technique with CE mark going through clinical trials in Europe and Australia. Fine electrodes with 4 contacts are threaded via the epidural space part way through the intervertebral foramen and allowed to lie up against the sensory dorsal root ganglia. Electrical fields are generated that can selectively stimulate different parts of the dorsal root ganglia. If needed, this allows focussing of stimulation onto specific nerve roots or parts of nerve roots. Because there is minimal CSF thickness there is very little variation in stimulation intensity on movement. Furthermore, the amplitude thresholds are so low that non-RIPG will suffice with excellent device longevity.

Clinical guidelines and health technology assessments

Medicine and healthcare continues to evolve. It is only in recent times that mainstream medicine and the healthcare systems around the world are taking note of the societal burden of neuropathic pain. Pharmaceutical companies have developed products and by sponsoring and working with university departments have helped bring products and therapy guidelines into mainstream medicine. Clinical trials with pharmaceutical products typically involve thousands of patient recruits, and placebo treatments are easy to devise. Complications tend to increase proportionally with the amount of active recruits. Treatment success is not dependent upon the prescriber. Statistical analysis on large study populations with a relatively small treatment effect can become statistically significant.^{12,13}

Device manufacturers offer devices that need surgical implantation and require acquired skill. Spinal cord stimulation is a therapy that usually requires the patient to have stimulation perception. Complications reduce with implanter experience. Most trials, relative to pharmaceutical trials, consist of a small number of participants. However, the treatment effect is an order of magnitude greater than seen with most pharmaceutical trials. It is for this reason that many of the SCS studies can demonstrate clinical significance despite the restrictions of running trials with fewer subjects.

The consequences have been that the methodologies of clinical guidelines groups and health technology assessments are more suited to larger trials with small treatment effects, and as such the role of SCS has been bypassed. This has got to stop. There are still eminent guideline groups and policymaking groups that choose to ignore the contribution that SCS can make in refractory cases.

Having said that, the UK Health policymaking advisory group, the National Institute of Clinical Excellence, did publish Technology Assessment guidance on SCS in Neuropathic and Ischaemic Pain (TAG 159).¹⁴ This was published in October 2008 and mandated that across the UK SCS should be commissioned for the treatment of refractory neuropathic pain. This was because the clinical evidence demonstrated both clinical and cost effectiveness in refractory neuropathic pain. Put more bluntly, failure to commission SCS wastes the UK healthcare resources in these patient groups. It remains a problem that to date 25% of primary care trusts (responsible for commissioning healthcare) fail to fund any SCS at all and another 50% have non-compliant commissioning practices (personal communication using Freedom of Information Act).

Across Europe there are countries that perform better and others worse. Much of it depends upon the relative difference in health funding streams rather than clinical need. Spinal cord stimulation market penetration is not present in many countries and is universally underachieving in all countries across the European union. For example, in Belgium those getting SCS compared to those that need it is still only at about 10%. In the UK, with only 1000 implants per year a similar estimate is only 3%.

Conclusions

- Neuropathic pain is a common healthcare problem with some patients who are refractory to standard treatment guidelines or burdened with the effects of such treatment
- Spinal cord stimulation offers a clinical and cost-effective treatment at lower lifetime healthcare cost with better long-term outcomes in such patients¹⁵
- Technological advances and increased understanding of the therapy area have resulted in better more reliable SCS treatments
- Neurostimulation implantation technology will in the future be as frequent a modality as cardiac brady- and tachy-arrhythmia technology in modern medicine today.

Dr. Simon Thomson, MBBS FRCA FIPP FFPMRCA Basildon & Thurrock University Hospital President of International Neuromodulation Society Reprinted with permission from <u>Hospital Healthcare Europe</u>

References

1. North RB et al. Spinal cord stimulation versus repeated lumbosacral spine surgery for chronic pain: a randomised, controlled trial. Neurosurgery 2005;56:98–106.

2. Kemler MA et al. Spinal cord stimulation in patients with chronic reflex sympathetic dystrophy. N Eng J Med 2000;343:618–624.

3. Kemler MA et al. Spinal cord stimulation for chronic reflex sympathetic dystrophy--fiveyear follow-up. N Eng J Med 2006;354:2394–2396.

4. North RB et al. Spinal cord stimulation versus re-operation in patients with failed back surgery syndrome: an international multicenter randomised controlled trial (EVIDENCE

Study). Neuromodulation 2011;14:330-6.

5. Kumar K et al. Spinal cord stimulation versus conventional medical management for neuropathic pain: a multicentre randomised controlled trial in patients with failed back surgery syndrome. Pain 2007;132:179–188.

6. Kumar K et al. The effects of spinal cord stimulation in neuropathic pain are sustained: a 24-month follow-up of the prospective randomised controlled multicenter trial of the effectiveness of spinal cord stimulation. Neurosurgery 2008;63(4):762–770.

7. Ekre O et al. Long-term effects of spinal cord stimulation and coronary artery bypass grafting on quality of life and survival in the ESBY study. Eur Heart J 2002;23:1938–1945.

8. Cruccu G et al. EFNS guidelines on neurostimulation therapy for neuropathic pain. Eur J Neurol 2007;14:952–970.

9. Breivik H et al. Survey of chronic pain in Europe: prevalence, impact on daily life, and treatment. Eur J Pain 2006;287–33.

10. Thomson S, Jacques L. Demographic characteristics of patients with severe neuropathic pain secondary to failed back surgery syndrome. Pain Pract 2009;9:206–214.

11. Holsheimmer J, Struijk. How do geometric factors influence epidural spinal cord stimulation? A quantitative analysis by computer modelling. Stereotact Funct Neurosug 1991;234–249.

12. NICE. (2010) Neuropathic pain: the pharmacological management of neuropathic pain in adults in non-specialist settings. Available at: www.nice.org.uk/CG96 (Accessed: 13 March, 2012)

13. Attal N et al. EFNS guidelines on pharmacological treatment of neuropathic pain. Eur J Neurol 2006;13:1153–1169.

14. NICE. (2008) Spinal cord stimulation for chronic pain of neuropathic or ischaemic origin. Available at:www.nice.org.uk/TA159 (Accessed: 13 March, 2012)

15. Krames E et al. Using the SAFE principles when evaluating electrical stimulation therapies for the pain of failed back surgery syndrome. Neuromodulation 2011;14:299–311.

INS Contributes Comments for Upcoming NICE Guidance on Peripheral Arterial Disease

The INS has registered as a stakeholder with the <u>Institute for Health & Clinical Excellence</u> (<u>NICE</u>) in all work streams that involve neuromodulation therapies. Dr. Simon Thomson, INS President, representing INS and the Neuromodulation Society of the United Kingdom and Ireland (NSUKI), recently issued comments on the NICE consultation document on peripheral arterial disease, making the case for the use of spinal cord stimulation (SCS) in the treatment of ischaemic pain.

He stressed the importance of vascular units working collaboratively with the pain centres that are experienced in treating chronic critical limb ischemia pain with SCS and in maintaining the therapy. Dr. Thomson also highlighted the need for an RCT of SCS and usual care versus usual care alone, with an appropriate outcome and cost effectiveness study, for which he and his colleagues in NSUKI intend to design a feasibility study.

NICE develops internationally recognized evidence-based guidelines on the most effective ways to diagnose, treat and prevent disease and, in 2008, recommended spinal cord stimulation for the treatment of chronic neuropathic pain but fell short of recommending SCS to the NHS in ischaemic pain syndromes unless part of a robust clinical trial that answers questions of clinical and cost effectiveness. Dr. Thomson, working closely with colleagues in NSUKI, British Pain Society, other professional societies, industry and patient charities helped advise NICE to at least recommend SCS in these circumstances. (http://www.nice.org.uk/TA159)

Engaging in open dialogue with healthcare authorities to expand worldwide access to

neuromodulation by raising awareness of its existence, clinical efficacy and cost effectiveness, is a vital part of the INS's mission. Where there are organizations like NICE that create disease management guidelines it is important that members in our field confidently engage with these organizations to ensure that neuromodulation is justly included in the disease management treatment pathways – and in many cases, this means crossing specialty boundaries.

🟊 Back to top

New! Members Can Customize a Suite of INS Fact Sheets

Members from around the globe have contributed a variety of submissions that are available as fact sheets for patients in a special, customizable format on the <u>members-only section</u> of the website. The fact sheets, prepared for a lay audience, describe common neuromodulation therapies and conditions. The photograph shows a fact sheet submitted by newsletter editor Dr. Marc Russo on display in the waiting room at the pain treatment clinic of Dr. Elliot Krames, past INS president and emeritus editor-in-chief of the INS journal, *Neuromodulation: Technology at the Neural Interface.*

The online collection represents an early phase in the expansion of unbranded educational materials available on the society website, made possible by grants from Medtronic, St. Jude Medical and Boston Scientific. The members-only area includes <u>instructions</u> to streamline adding contact information to the documents for a seamless appearance. In the version pictured in the photograph, Dr. Krames' INS affiliation is shown along with the location and phone number of his treatment center. Customized versions may be forwarded electronically if saved as PDFs, or printed in double-sided format. Other versions of the content may be viewed by the public on the <u>patient section</u> of the INS website.

Contributions to date include:

- Brain-Computer Interface in Movement Disorders by John P. Donoghue, PhD
- <u>Complex Regional Pain Syndrome</u> by Marc Russo, MBBS, DA(UK)FANZCA, FFPMFANZCA
- Deep Brain Stimulation by Nancy Garcia, reviewed by Hong Yu, MD
- Deep Brain Stimulation Surgery by Nancy Garcia, reviewed by Hong Yu, MD
- Gastric Disorders by Jiande Chen, PhD
- <u>Medically Refractory Angina</u> by Christophe Perruchoud, MD, and Mike JL DeJongste, MD, PhD
- Medically Refractory Headache by Erich O. Richter, MD, Kenneth M. Aló, MD, and Marina V. Abramova, MD
- Migraine by Nancy Garcia; reviewed by Kenneth M. Aló, MD
- Neuropathic Pain by Simon Thomson, MBBS, FRCA, FIPP, FFPMRCA
- Parkinson's Disease by Hong Yu, MD and Konstantin V. Slavin, MD
- <u>Spinal Cord Stimulation</u> by Nancy Garcia, reviewed by Simon Thomson, MBBS, FRCA, FIPP
- Urologic Disorders by Magdy Hassouna, MD, PhD, FRCSC

🟊 Back to top

MEDLINE Indexing is Now Complete for *Neuromodulation: Technology* at the Neural Interface

In August 2011, The National Library of Medicine (NLM) accepted *Neuromodulation: Technology at the Neural Interface*, the journal of the International Neuromodulation Society, for indexing in <u>Medicus, MEDLINE and PubMed</u>. Since that time, the Editorial Office has been working with our publisher, Wiley-Blackwell, and the NLM's Content Delivery Team to load content to the MEDLINE database. I am now delighted to inform you that all content, from the journal's first issue through the present, has been MEDLINE listed. We would like to reiterate our thanks to all of those who helped make this momentous occasion possible, including our associate editors, editorial board members, reviewers, authors, commercial supporters and our publisher, Wiley-Blackwell – all of whom have played a significant role in getting the journal to where it is today. We invite you to <u>submit</u> your work to *Neuromodulation*, a MEDLINE-indexed journal!

Dr. Robert M. Levy, MD, PhD Editor-in-Chief Neuromodulation: Technology at the Neural Interface

🔈 Back to top

Argentinean Chapter Launches Website

Dear members of the INS,

The Argentinean Chapter of the INS, Sociedad Argentina de Neuromodulación (SANE), takes pleasure in inviting you to view its new Spanish-language website, <u>www.sane.org.ar</u> or <u>www.neuromodulacion.org.ar</u>.

The chapter board developed the site over the past two years as part of the chapter mission to present neuromodulation in all its aspects, with a particular focus on the spread of this therapeutic modality within the medical community so that providers can enhance their understanding, training, and application of these treatment modalities in patients who could benefit, as well as to raise awareness within the general population.

In keeping with SANE's foundation of interdisciplinary teamwork, the chapter's efforts are strengthened with input from anesthesiologists, neurologists, neurosurgeons, clinicians, orthopedic surgeons, engineers, and basic researchers, among others. The members of SANE, in carrying forth their commitment to this field, invite fellow INS members to continue the path of reciprocal exchange and cooperation regarding patient care, research, or events. With our website in operation it would be an especially great honor and privilege to receive articles for publication in our journal NeuroTarget; Revista de Neurocirugía Funcional, Estereotaxia, Radiocirugía y Dolor (www.neurotarget.com), which is the official scientific organ of SANE. You may find a link to the journal from our chapter website. At the same time that the site was created, the chapter also established an email address for official communications with its Executive Council: <u>secretaria@sane.org.ar</u>. We welcome any comments regarding the chapter website and invite you to explore it as a means to facilitate our continued and fruitful interchange.

Dr. Fabián Piedimonte President, Sociedad Argentina de Neuromodulación (SANE)

📤 Back to top

Poland Chapter Under Creation Joins in Offering May 2012 Joint Conference

On behalf of the Interventional Chapter of the Polish Pain Society, the Polish Neuromodulation Society and the Neuromodulation Society of the UK and Ireland, we welcome everyone with an interest in pain management and neuromodulation to take part in our historic joint conference in the Baltic seaside resort of Sopot, Poland on 12 May 2012. The meeting will be divided into two parts covering neuromodulation and interventional pain management.

Link: www.medycynabolu.com.pl

A satellite cadaver workshop is also planned for the meeting on the 13th of May. Link: http://www.cadaverworkshop.info/current-workshop.

The Polish Neuromodulation Society inaugural meeting took place at Hotel Bristol, Warsaw, on 16th April 2011. Thirty-five participants from all the specialities, with a predominance of



INS patient-education fact sheet in clinic waiting room.

neurosurgeons, attended. The meeting was supported by St Jude, Boston Scientific and Renishaw. A board for the society was voted in with Professor Wojciech Maksymowicz as the President, Dr. Teodor Goroszeniuk as the Vice-President and Dr. Wieslaw Łach as the Secretary. Following this meeting court registration was applied for and received on 13th July 2011.

The first joint meeting of the Polish Neuromodulation Society and the Interventional Section of the Polish Pain Society took place in the beautiful city of Wroclaw on 3rd September 2011. The meeting was well attended with 100 participants and an international faculty including Professor Jose de Andres, Dr. Declan O'Keeffe, Dr. Sam Eldabe, Dr. Philippe Mavrocordatos, Dr. Jonathan Richardson, Dr. Charles Gauci, Dr. Pavel Michalek and Dr. Andrzej Krol. It was evident from the meeting that cooperation with other professional bodies like the Interventional Section of the Polish Pain Society, Functional & Stereotactic Society and the Polish Pain Society would be a top priority in order to be a part of the wider coordinated movement of pain and function management. Feedback for the meeting from national and international participants was very positive. Annual meetings are planned in various parts of the country.

The Polish Neuromodulation Society is now making all necessary formalities to apply to become a chapter of the International Neuromodulation Society and this is in progress.

Dr. Wiesław Łach Secretary of Polish Neuromodulation Society Board of Directors President: Prof. Wojciech Maksymowicz Vice President: Dr. Teodor Goroszeniuk Secretary: Dr. Wiesław Łach Treasurer: Dr. Leszek Herbowski Member: Dr. Dariusz Jeżewski

For more information, contact: Email: inspoland@gmail.com Address: Department of Neurosurgery University of Warmia and Mazury Street: Warszawska 30 10-082 Olsztyn

neurochirurgia@moskit.uwm.edu.pl Office tel: +48 (089) 5245373 Fax: +48 (089) 5245384

📤 Back to top

Russian Chapter is Under Formation

Dear colleagues!

For the past four to five years in Russia clinical treatment using neuromodulation methods has been developing for patients with a variety of symptoms and diseases. The quantity of patients who have been surgically treated has raised manifold. The rapid development of this interesting area of medicine is closely influenced by two factors:

The first influence has been the significant improvement of medical education in Russia, mainly owning to active scientific relations with foreign specialists, from the organization of meetings and conferences where foreign specialists participate, and also thanks to the appearance of educational programs for doctors and patients, as well as a popularization of neuromodulation methods, and one more very important factor – development of the Internet.

The second very important factor is obtaining of financial support by the Healthcare Ministry of Russia for advancing of neuromodulation methods in routine medical practice.

After participation in May 2011 at the London INS Congress, it became apparent that there is a real necessity to create a Russian chapter of the INS. This question was discussed with leading specialists working in the field of neuromodulation, INS President Dr. Simon

Thomson; INS Director-at-Large Dr. Konstantin Slavin; and Tia Sofatzis, executive director of the INS.

As result of joint work by a few specialists who are practicing neuromodulation techniques and methods in Russia, the Russian National Chapter of Neuromodulation was initiated. Currently the Russian National Chapter of Neuromodulation is a legally registered organization with its full set of required regulation documents and its own membership possibilities. Among partners of the Russian chapter are companies like Medtronic, St. Jude, Codman, and Novartis.

We plan to present the activities of our society not only through neurosurgical meetings, but also to engage work of our colleagues – neurologists, anaesthesiologists, and physiotherapists. It is the very beginning of a great and interesting journey! In the near future the Russian chapter website will be available for everybody interested in getting deeper into our chapter current news, activities, and schedule of meetings. Also all our regulation documents and data will be provided.

Beginning any great endeavor I always remember words of American psychologist William James: "Our faith is the only thing which makes success of every beginning we make. It is amazing how a latent wish of something better activates strengths leading to completion of what is desired".

Dr. Jamil Rzaev, MD, PhD neurosurgeon, Department of Neurosurgery Research Institute of Traumatology and Orthopaedics 195427, St. Petersburg Akad.Baykova st., 8 tel. +7 (812) 670 8625 fax +7 (812) 670 8636 cell +7(921) 754-7754 jamilrzaev@yahoo.com info@doctorrzaev.ru www.doctorrzaev.ru

📤 Back to top

New! Translation Function Added to INS Site – Consider Making Its Homepage Your Browser Homepage to See All the Daily News Briefs

In keeping with the international nature of the INS, the Executive Office has arranged for a built-in Google Translate option to appear at the top of each page on the society's website, www.neuromodulation.com. This convenience should make the information provided each day even more accessible to audiences around the world. Did you know you can adjust your browser setting to start <u>on any page you choose</u>? You might want to make the INS site your browser's start page in order to quickly see the news briefs posted there each day. Directions are at the link above.

🕒 Back to top

New Look to Society's Page on Facebook

With the social media site Facebook switching to a new look March 30, its INS socialsharing page has a new appearance there, and presents a bit more about the society's history. Everybody with access is welcome to take a look, comment, and share announcements or meeting photos at <u>on.fb.me/INS_FB</u>.

📤 Back to top

Last Updated on Tuesday, December 13, 2016 12:21 PM