

Pain NEWS



American
Association of
Neurological
Surgeons



Spring 2010

A A N S / C N S S e c t i o n o n P a i n

Editor:

Jeffrey Arle, MD, PhD

www.neurosurgery.org

President's Message



In the previous edition of the *Pain News*, I discussed the intense debate underway regarding "health care reform" in the US. Unless one has been sequestered by court order for the past few weeks, one should be well aware that, over

the objections of the majority of the US population, congress has passed a bill that purports to be in the best interest of all citizens of this country. While it may be difficult to argue with a number of components of the bill, such as increasing the ranks of the insured, the fundamentals of this bill reflect an ideology which believes in complete governmental control in all issues related to health care, with this bill being a first step in this protracted process.

While it is my belief that we must remain vigilant in our attempts to expose this "reform" for what it really represents (see above), this cannot detract from our goal to continue to provide the appropriate pain care to those in need. Surgical pain procedures, in particular those involving implantable neuromodulation technology, are by their nature expensive, requiring extensive hardware and personnel resources in the long-term. Quite frankly, if we as physicians do not create appropriate treatment guidelines based on our own validated best practices and outcome studies (including cost-effectiveness studies), they will be created for us (and, of course, for our patients!) by such entities as the soon-to-be-invented Medicare Independent Advisory Council. Furthermore, continued advocacy on our part to local, state, and national agencies is essential.

For a variety of socioeconomic and historical reasons, our section has traditionally been one of the smallest ones in the AANS/CNS. We are well aware that the field of pain medicine is dominated by non-neurosurgeons, which can pose problems for those neurosurgeons who wish to devote a significant portion of their practice to managing these patients.

Many of us have heard of hospitals where the credentialing committees, dominated by anesthesia pain specialists, will refuse to credential a neurosurgeon to place a spinal cord stimulator or an intrathecal pump. The solution to these issues is multifactorial, clearly necessitating active involvement by the neurosurgical pain community in multispecialty pain societies, of which there are quite a number. What is perhaps even more important is continued and increased exposure to neurosurgical pain management during residency training. In that regard, we will soon be fully funded to provide a yearly John Oakley Fellowship in Surgical Pain Management to a senior level neurosurgical resident to gain experience in the surgical management of pain at an institution other than their home site. We are also in the process of arranging a one-day resident course in neurosurgical pain management - full details to follow.

The upcoming AANS meeting in Philadelphia will feature two important pain-related items: the biennial pre-meeting symposium on Friday, April 30th, entitled "Complication Avoidance in the Neurosurgical Pain Patient: How to Make the Situation Better, Not Worse." This symposium promises to be a unique, multidisciplinary approach to the identification and management of pain-related neurological and neurosurgical complications. On Wednesday, May 5th, the pain section will host the annual John Loeser Lecture. Entitled "Neurostimulation of the Peripheral Nervous System. What is old and what is new?", the lecture will be delivered by Dr. Giancarlo Barolat, a pioneer in the field of neuromodulation of the spinal cord and peripheral nervous system. This will be followed by a lecture by Dr. Robert Schwartzman, chairman of neurology at Drexel University, entitled "Complex Regional Pain Syndrome: Insights on Pathophysiology and treatment." We look forward to your attendance.

As always, we welcome any submissions to the pain newsletter. Please submit any contributions to our editor, Jeffrey Arle, and always feel free to contact me or members of the executive committee with your ideas and suggestions.

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AANS/CNS Section on Pain 2010 Biennial Meeting

Philadelphia Marriott Downtown, Philadelphia, Pennsylvania
Jointly Sponsored by AANS

PROGRAM AGENDA

Complication Avoidance in the Neurosurgical Pain Patient:
How to Make the Situation Better, Not Worse

FRIDAY, APRIL 30, 2010

7:15 – 8:00 AM

Continental Breakfast

Grand Ballroom, Salon I

8:00 – 8:15 AM

Welcome and Introduction

Alon Mogilner, MD, PhD (Great Neck, NY)

Pain Complications: Overview and Diagnosis

Grand Ballroom, Salon J

8:30 – 9:00 AM

Psychological Assessment of the Chronic Pain Patient

David Libon, PhD

9:00 – 9:30 AM

Medicolegal Issues Involving Chronic Pain Patients

Daniel F. Ryan, Esq.

9:30 – 9:45 AM

Coffee Break & Exhibit Viewing

Grand Ballroom, Salon I

9:45 – 10:30 AM

Pain Complications: Spinal

Ashwini Sharan, MD

10:30 – 11:00 AM

Pain Complications: Cranial

Jason Schwalb, MD

11:00 – 11:30 AM

Pain Complications: Peripheral Nerve

Andre Machado, MD

11:30 AM – 12:00 PM

Panel Discussion

11:45 AM – 1:00 PM

Lunch

Grand Ballroom, Salon I

Pain Complications: Treatment

Grand Ballroom, Salon J

1:00 – 1:30 PM

Medical Pain Management

Chris Winfree, MD

1:30 – 2:00 PM

Surgical Pain Management

Joshua Rosenow, MD

2:00 – 2:30 PM

Neuromodulation I: Spinal Cord Stimulation

Jeffrey Arle, MD, PhD

2:30 – 2:45 PM

Coffee Break & Exhibit Viewing

Grand Ballroom, Salon I

2:45 – 3:30 PM

Surgical Treatment: Neuromodulation II – Peripheral Stimulation

Chris Winfree, MD

3:30 – 4:00 PM

Surgical Treatment II: Neuromodulation III – Intrathecal Infusion Therapy

Julie Piltsis, MD

4:00 – 4:30 PM

Complications of Neuromodulation

George Mandybur, MD

4:30 – 5:00 PM

Panel Discussion

5:00 – 6:00 PM

Reception

Grand Ballroom, Salon J

ACKNOWLEDGEMENTS

The AANS/CNS Section on Pain thanks the following companies for their educational grant in support of the Annual Meeting:

**Boston
Scientific**



Medtronic

International Research Team Finds Hidden Sensory System In The Skin

Persons Lacking Known Nerve Receptors Can Still Touch and Feel; May Shed Light on Causes of Unexplained Pain Such as Fibromyalgia

The human sensory experience is far more complex and nuanced than previously thought, according to a groundbreaking new study published in the December 15 issue of the journal *Pain* (<http://www.ncbi.nlm.nih.gov/pubmed/19836135>). In the article, researchers at Albany Medical College, the University of Liverpool and Cambridge University report that the human body has an entirely unique and separate sensory system aside from the nerves that give most of us the ability to touch and feel. Surprisingly, this sensory network is located throughout our blood vessels and sweat glands, and is for most people, largely imperceptible.

"It's almost like hearing the subtle sound of a single instrument in the midst of a symphony," said senior author Frank Rice, PhD, a Neuroscience Professor at Albany Medical College (AMC), who is a leading authority on the nerve supply to the skin. "It is only when we shift focus away from the nerve endings associated with normal skin sensation that we can appreciate the sensation hidden in the background."

The research team discovered this hidden sensory system by studying two unique patients who were diagnosed with a previously unknown abnormality by lead author David Bowsher, MD, Honorary Senior Research Fellow at the University of Liverpool's Pain Research Institute. These patients had an extremely rare condition called congenital insensitivity to pain, meaning that they were born with very little ability to feel pain. Other rare individuals with this condition have excessively dry skin, often mutilate themselves accidentally and usually have severe mental handicaps. "Although they had a few accidents over their lifetimes, what made these two patients unique was that they led normal lives. Excessive sweating brought them to the clinic, where we discovered their severe lack of pain sensation," said Dr. Bowsher. "Curiously, our conventional tests with sensitive instruments revealed that all their skin sensation was severely impaired, including their response to different temperatures and mechanical contact. But, for all intents and purposes, they had adequate sensation for daily living and could tell what is warm and cold, what is touching them, and what is rough and smooth."

The mystery deepened when Dr. Bowsher sent skin biopsies across the ocean to Dr. Rice's laboratory, which focuses on multi-molecular microscopic analyses of nerve endings in the skin, especially in relation to chronic pain conditions such as those caused by nerve injuries, diabetes, and shingles. These unique analyses were pioneered by Dr. Rice at Albany Medical College (AMC) along with collaborators at the Karolinska Institute in Stockholm, Sweden. "Under normal conditions, the skin contains many different types of nerve endings that distinguish between different temperatures, different types of mechanical contact such as vibrations from a cell phone and movement of hairs, and, importantly, painful stimuli," said Dr. Rice. "Much to our surprise, the skin we received from England lacked all the nerve

endings that we normally associated with skin sensation. So how were these individuals feeling anything?"

The answer appeared to be in the presence of sensory nerve endings on the small blood vessels and sweat glands embedded in the skin. "For many years, my colleagues and I have detected different types of nerve endings on tiny blood vessels and sweat glands, which we assumed were simply regulating blood flow and sweating. We didn't think they could contribute to conscious sensation. However, while all the other sensory endings were missing in this unusual skin, the blood vessels and sweat glands still had the normal types of nerve endings. Apparently, these unique individuals are able to 'feel things' through these remaining nerve endings," said Dr. Rice. "What we learned from these unusual individuals is that there's another level of sensory feedback that can give us conscious tactile information. Problems with these nerve endings may contribute to mysterious pain conditions such as migraine headaches and fibromyalgia, the sources of which are still unknown, making them very difficult to treat."

In addition to international collaborations such as this one, Dr. Rice and his principle AMC colleague, Dr. Philip Albrecht, in the Center for Neuropharmacology and Neuroscience, collaborate extensively with neurologists Dr. Charles Argoff at AMC and Dr. James Wymer of Upstate Clinical Research Associates, who also holds a joint AMC appointment. All are co-authors on the study, which included normal subjects from the Albany, NY area. Several studies on chronic pain are being conducted by this team with support from National Institutes of Health (NIH) and several pharmaceutical companies.

About Integrated Tissue Dynamics (INTIDYN)

To facilitate these collaborations, Dr. Rice and Dr. Albrecht, recently founded a new biotechnology company, Integrated Tissue Dynamics, LLC, also known as Intidyn (www.intidyn.com). Intidyn provides flexible and scalable research capabilities on behalf of pharmaceutical companies to detect chemical and structural changes in the skin that may cause the chronic numbness, pain and itch associated with a wide variety of afflictions such as diabetes, shingles, complex regional pain syndrome, carpal tunnel syndrome, sciatica, fibromyalgia, psoriasis, chemotherapy and even the unintended side effects caused by many drugs. Such afflictions and the associated neurological problems respond poorly to existing treatments. The preclinical and clinical research conducted by AMC and Intidyn facilitates biomarker identification and the evaluation of potential therapeutic strategies to prevent or treat these naturally-occurring afflictions and drug-induced side effects that harm the skin and nerves.

"By looking carefully at genomics and the structural and chemical differences between normal and diseased skin, we can better determine if a treatment is working or if it's even targeting the right problem," said Dr. Rice. "For example, in cases of 'unexplained' pain that's unresponsive to conventional treatment, it's important to know

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Upcoming Meetings

Upcoming Meetings of Interest

May 2010

8th National Congress of the Sociedad Espanola Del Dolor and 9th Iberoamerican Meeting

DATE: May 26-29, 2010
LOCATION: Madrid, Spain
CONTACT: info@sedolor.es
www.sedolor.es

New Frontiers in Pain Medicine: 33rd National Congress of the Associazione Italiana per lo Studio del Dolore

DATE: May 27-29, 2010
LOCATION: Florence, Italy
CONTACT: segreteria@aiss.it
www.aisd.it

Third International Congress of Neuropathic Pain

DATE: May 27-30, 2010
LOCATION: Athens, Greece
CONTACT: (+41-22-908-0488)
neuropathic@kenes.com
www.kenes.com/neuropathic

June 2010

6th EAPC Research Congress of the European Association for Palliative Care

DATE: June 9-12, 2009
LOCATION: Glasgow, United Kingdom
CONTACT: Heidi Blumhuber:
Heidi.Blumhuber@istitutotumoti.mi.it
www.eapcnet.org/Research2010

Seventh East-West Pain Conference – 20th Anniversary of Chinese Association for the Study of Pain

DATE: June 18-22, 2010
LOCATION: Beijing, China
CONTACT: (+86-10-82805185)
ywan@hsc.pku.edu.cn
bjqinghual@vip.sina.com
www.casp.org.cn

August/September 2010

13th World Congress on Pain

DATE: August 29 - September 2, 2010
LOCATION: Montreal, Canada
CONTACT: (206-283-3001)
iaspdesk@iasp-pain.org
www.iasp-pain.org/Montreal

October 2010

9th Congresso Brasileiro de Dor Annual Meeting of the Sociedade Brasileira De Estudo da Dor

DATE: October 6-9, 2010
LOCATION: Fortaleza-Ce, Brazil
CONTACT: (55-85-9111-7273)
mcastro@ufc.br
www.dor.org.br

2nd International Pain Management Symposium

DATE: October 26-28, 2010
LOCATION: Riyadh, Saudi Arabia
CONTACT: f38147@kfshrc.edu.sa
www.KFSHRC.edu.sa

The 14th International Pain Clinic Congress & 1st Asian Congress on Pain: From Ancient to Modern Pain Medicine

DATE: October 28-31, 2010
LOCATION: Beijing, China
CONTACT: (+41-22-908-0488)
wspc@kenes.com
www.kenes.com/wspc

The European Headache and Migraine Trust International Congress

DATE: October 28-31, 2010
LOCATION: Nice, France
CONTACT: (+41-22-908-0488)
ehmtic@kenes.com
www.kenes.com/EHMTIC

if nerve receptors in the vascular and sweat gland tissue are involved, and if so, whether a given treatment is targeting those nerves. We can also see if a pain treatment is damaging vascular tissue, for example, and make inferences about what the impact of that damage might mean clinically.”

Most recently, Intidyn has partnered with neurologists and fellow co-authors, Drs. Argoff and Wymer to study a mysterious condition called fibromyalgia. They suspect the unrelenting pain may be related to the sensory nerve endings on blood vessels deep in the skin.

About Albany Medical College

At Albany Medical College, one of the nation’s oldest medical schools, basic research scientists work to facilitate discoveries that translate into medical innovations at patients’ bedsides. NIH-funded scientists are conducting research in many exciting areas including infectious disease, biodefense, addiction, cancer, pain, and more. Albany Medical Center is northeastern New York’s only academic health sciences center. It consists of Albany Medical College, Albany Medical Center Hospital; and the Albany Medical Center Founda-

tion, Inc. Additional information about Albany Medical Center can be found at www.amc.edu.

Citation:

Bowsher D., Geoffrey Woods C., Nicholas A.K., Carvalho O.M., Hagggett C.E., Tedman B., Mackenzie J.M., Crooks D., Mahmood N., Aidan Twomey J., Hann S., Jones D., Wymer J.P., Albrecht P.J., Argoff C.E., Rice F.L. Absence of pain with hyperhidrosis: A new syndrome where vascular afferents may mediate cutaneous sensation. *PAIN*. 2009 Dec 15;147(1-3):287-98.

Questions & Comments:

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Save the Date!

American Association of Neurological Surgeons’ 2011 Annual Meeting

Denver, Colorado
April 9-13, 2011
Visit www.AANS.org
for updated
meeting details!



American
Association of
Neurological
Surgeons

Save the Date!

Congress of Neurological Surgeons Annual Meeting

San Francisco, California
October 16-21, 2010
Visit www.cns.org for
updated meeting details!



CNS Preliminary Program At-A-Glance

Sunday, October 17, 2010

SYMI — 8:00 AM - 4:00 PM
Neuromodulation Symposium

Monday, October 18, 2010

Section on Pain — 1:30 - 3:00 PM
Section on Pain Top Ten Abstracts

Section on Pain — 3:00 - 4:30 PM
Neurosurgical Forum

Tuesday, October 19, 2010

T21 — 12:00 - 1:30 PM
Management of Trigeminal Neuralgia and Facial Pain

Wednesday, October 20, 2010

Section on Pain — 1:30 - 3:00 PM
Coding and Reimbursement in a Neurosurgical Pain Practice

Thursday, October 21, 2010

GSS IV — 9:00 - 10:30 AM
**Cases and Coffee with the Masters - Stereotactic and Functional/
Pain**

CNS Meeting, Fall 2010
Joint Section on Pain
Wednesday, Oct 20, 2010
1:30-3:00 PM

Coding a neurosurgical pain practice

Moderators: Julie Pilitsis MD, PhD and Andre Machado, MD, PhD

Learning Objectives:

1. To describe 2010 codes employed in neurosurgical practice
2. To determine the impact of hospital coding on reimbursement
3. To develop a strategy for successful reimbursement of pain procedures

Coding and Reimbursement in a Neurosurgical Pain Practice

Sanford Fineman, MD

Physician coding for intrathecal pumps – Ming Cheng, MD

Physician coding for neurostimulation – Chris Winfree, MD

Hospital coding for pain procedures – Alon Mogilner, MD

Panel discussion 10 min



American
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Application for Membership



AANS/CNS Section on Pain

Eligibility: Members of the AANS and/or CNS who are actively interested in the management of pain problems.

I. Biographical:

(A) Name: _____

(B) Home Address: _____

(C) Office Address: _____

Phone: _____ Fax: _____

(D) E-mail: _____

II. Category of Membership Requested:

☐ Active ☐ Associate ☐ International

III. Membership, Certification and Practice:

(A) Are you now certified by the American Board of Neurological Surgery? ☐ Yes ☐ No

(B) Are you a member of:

1. The American Medical Association? ☐ Yes ☐ No

2. A Local or Regional Medical Society? ☐ Yes ☐ No

3. A State or Provincial Medical Society?
Name: _____ ☐ Yes ☐ No

4. American Association of Neurological Surgeons? ☐ Yes ☐ No

5. Congress of Neurological Surgeons? ☐ Yes ☐ No

6. The American Academy of Pain Medicine? ☐ Yes ☐ No

7. American Pain Society? ☐ Yes ☐ No

8. International Association for the Study of Pain? ☐ Yes ☐ No

Signature of Applicant

Date

Please return completed application with your membership fee of \$50 to:
AANS/CNS Section on Pain
Department 77-7550
Chicago, Illinois 60678-7550

AANS/CNS Section on Pain

5550 Meadowbrook Drive
Rolling Meadows, Illinois 60008-3852

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