ABSTRACT BOOK

Chronic Pain – Pharmacologic and Interventional Therapy

October 24 – 25, 2008
Congressi Monte Verità
Ascona, Switzerland

Chairman
Prof. Eli Alon, Zurich

SCHWEIZERISCHE GESELLSCHAFT ZUM STUDIUM DES SCHMERZES
SOCIETE SUISSE POUR L'ETUDE DE LA DOULEUR
ASSOCIAZIONE SVIZZERA PER LO STUDIO DEL DOLORE
SWISS ASSOCIATION FOR THE STUDY OF PAIN

Organized by IMK Institute for medicine and communication Ltd.

Welcome to Ascona

Dear friends and colleagues,

It is a great pleasure for us to welcome you to the "Chronic Pain – Pharmacologic and Internventional Therapy" Symposium which is held in Ascona, Switzerland, October 24 - 25, 2008.

Main topics of this exceptional meeting will be the state of the art of newer drugs and interventional approaches in the treatment of various chronic pain conditions and is therefore not only of great importance to all pain specialists but also very interesting to many anesthesiologists, neurologists, neurosurgeons, radiologists, rheumatologists and headache specialists.

Our national and international speakers will provide you with the latest information about chronic pain management in four languages (German, English, French and Italian).

We hope the program attracts your interest and we look forward to welcome you to the beautiful city of Ascona, Switzerland.

Professor Eli Alon
Chairman of the congress

Dr. Maciej Stepniewski
President SSIPM

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General Information

Congress Venue

Congressi Monte Verità
Via Collina 78
CH-6612 Ascona
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Email: info@monteverita.org
www.monteverita.org

Homepage

www.imk.ch/pain2008

Congress Chairman

Prof. Eli Alon, Zurich

Scientific Program

Dr. Philippe Mavrocordatos, Geneva
Prof. Eli Alon, Zurich

Administrative secretariat

IMK - Institute for medicine and communication Ltd.
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Registration Fees*

	on-site registration
members of SGSS|SSED and SSIPM	250
non-members	300

All prices in CHF.
*incl.: all scientific sessions, coffee breaks, congress certificate, congress bag.

Cancellation policy

In the event your enrollment must be cancelled, your tuition less a CHF 50.- administrative fee will be refunded if we are notified by September 24, 2008. No refunds will be made after that date.

Credits

SGAR|SSAR: 6 Credits
SNG|SSN: 5 Credits
SGN|SSN: 6 Credits
If you are a member of the SGR, please contact the society directly for credits: www.rheuma-net.ch

Social dinner

Friday, October 24, 2008, 20:00
at Congress venue
Costs: CHF 70.- per person

Friday October 24, 2008

13.30–14.00 **Opening Ceremony**
E. Alon, Zurich | M. Stepniewski, Aarau

	Paralellsession		
	Room 1 (English)	Room 2 (Français)	Room 3 (Deutsch)
	Chair: T. Cackett, Zurich	Chair: P. Mavrocordatos, Geneva	Chair: A. Borgeat, Zurich
14.00–14.30	**Definition and classification of neuropathic pain–latest updates** P. Hansson, Stockholm	**Douleur chroniques: Nouvelles cibles thérapeutiques?** I. Decosterd, Lausanne	**Electronic data capturing (EDC) in the musculosceletal pain management** R. Theiler, Zurich
14.30–15.00	**Pulsed radiofrequency in pain treatment** M. Sluijter, Nottwil	**Traitements médicamenteux des douleurs intermittentes** V. Piguet, Geneva	**Qualitätssicherung in der Schmerztherapie: Round table Diskussion** A. Klöpfer, Lucerne
15.00–15.30	**Spinal cord stimulation (SCS) in the treatment of chronic pain** A. Aeschbach, Zurich	**La stimulation médullaire dans le traitment de la douleur** E. Buchser, Morges	
15.30–16.00	**Coffee Break**		
16.00–16.30	**Percutaneous interventions for trigeminal neuralgia** S. Erdine, Istanbul	**Management de la qualité dans un centre interdisciplinaire de traitement de la douleur** P. Mavrocordatos, Geneva	
16.30–17.00	**Immunology and pain** M. Sluijter, Nottwil	**Opioid induced Hyperalgesia** A. Borgeat, Zurich	
17.00–17.45	**David Niv distinguished Lecture** Chair: E. Alon, Zurich **Psychological aspects of chronic pain management** M. Bond, Glasgow		
17.45–18.00	**Cocktail reception**		
18.00–19.45	**General Assembly** **SSIPM** Swiss Society for Interventional Pain Management		
18.00–19.45	**Executive Board Meeting** **EFIC** European Federation of IASP Chapters		
20.00	**Social dinner** with musical Entertainement		

Saturday October 25, 2008

	Paralellsession		
	Room 1 (Deutsch)	Room 2 (Italiano)	Room 3 (English)
	Chair: A. Wüst, Wädenswil	Chair: G. Varrassi, L'Aquila	Chair: M. Sluijter, Nottwil
9.00–9.30	**Analgetikainduzierte Kopfschmerzen** P. Sandor, Zurich	**Il dolore neuropatico – ieri, oggi, domani** P. Marchettini, Milano	**Tips and tricks in radiofrequency – Round table discussion** M. Sluijter, Nottwil S. Balogh, Nottwil
9.30 –10.00	**Neue Verabreichungsformen von Opioiden** C. Konrad, Lucerne	**Aspetti economici del dolore cronico** F. Marinangeli, L'Aquila G. Varrassi, L'Aquila	
10.00–10.30	**Cannabinoide in der Behandlung von akuten und chronischen Schmerzen – was ist sicher?** H. Kress, Wien	**Il secondo scalino del WHO e la titolazione degli oppioidi** F. De Conno, Milano	
10.30–11.00	**Coffee Break**		Room 3 (Français)
11.00–11.30	**Steroids in interventional pain management** M. Jaquenod-Linder, Zurich	**Risultati della radiofrequenza pulsata nel trattamento del dolore radicolare cronico** P. Schianchi, Lugano	**Le programme ADAPT: Une valeur ajoutée aux thérapies invasives?** D. Skouvaklis, Lausanne
11.30–12.00	**Ziconotide (Prialt): eine vielversprechende Alternative zur intrathekalen Opioiden** H. Kress, Wien	**La Neurostimolatore Spinale** P. Marchettini, Milano	
12.00–12.30	**Algorithmen für die interventionelle Schmerztherapie** M. Hartmann, Basel	**Dolore cronico durante la gravidanza** E. Alon, Zurich	
12.30	**Closing Ceremony**		

Sponsors

We would like to thank the following companies for their generous support of our conference:

Prof. Dr. Per Hansson

Pain Center
Department of Neurosurgery
Kardinska University Hospital
Clinical Pain Research
17176 Stockholm
Sweden

Dr. Per Hansson, MD, DMSci, DDS, is professor of clinical pain research at the Karolinska Institute and a specialist in neurology and pain medicine at the Karolinska University Hospital in Stockholm, Sweden. Dr. Hansson is head of and a senior consultant at the Pain Center, Dept. of Neurosurgery and head at Clinical Pain Research, Dept. of Molecular Medicine and Surgery at Karolinska Institute. He received his dental and medical degrees from the Karolinska institute in 1979 and 1986, respectively, and his DMSci in physiology at the same institute in 1985. Dr. Hansson was appointed associate professor of physiology in 1991 and professor of clinical pain research in 2000.

Peripheral and central neuropathic pain, somatosensory testing, endogenous pain controlling systems and functional brain imaging represent major areas of interest in Dr. Hanssons research.

Dr. Hansson is a reviewer for many scientific journals and has served as co-editor of Pain reviews, at the editorial board of "Pain, Clinical updates" and is currently field editor for clinical medicine/neurology of the European Journal of Pain. He has published more than 130 journal articles and book chapters, and has lectured at numerous conferences and symposia worldwide. He is co-editor of 2 books published by the IASP-Press.

Dr. Hansson is a member of several professional societies such as the International Association for the Study of Pain and has served as scientific secretary of the Swedish Society of Algology and as scientific advisor to the Swedish Medical Product Agency. From 2003-2006 he was president of the Scandinavian Association for the Study of Pain.

Definition and classification of neuropathic pain–latest update

Friday, October 24, 2008
14.00-14.30

Pain frequently results from activation of nociceptive afferents by actually or potentially tissue-damaging stimuli. Pain may also arise by activity generated within the nervous system without adequate stimulation of its peripheral sensory endings. For this type of pain, the International Association for the Study of Pain introduced the term "neuropathic pain" defined as "pain initiated or caused by a primary lesion or dysfunction in the nervous system". While this definition has been useful in distinguishing some characteristics of neuropathic and nociceptive types of pain, it lacks defined boundaries. Since the sensitivity of the nociceptive system is modulated by its adequate activation (e.g., by central sensitization), it has been difficult to distinguish "neuropathic dysfunction" from physiological neuroplasticity (Hansson et al. 2001). A more precise definition has been developed by a group of experts from the neurological and pain community (Treede et al. 2008): Pain arising as a direct consequence of a lesion or disease affecting the somatosensory system. The reference to the somatosensory system was derived from a wide range of neuropathic pain conditions ranging from painful neuropathy to central post-stroke pain. Because of the lack of a specific diagnostic tool for neuropathic pain, a grading system of "definite", "probable", and "possible" neuropathic pain is also proposed (see below). The grade "possible" can only be regarded as a working hypothesis, which does not exclude but does not diagnose neuropathic pain. The grades "probable" and "definite" require confirmatory evidence from a neurological examination. This grading system is proposed for clinical and research purposes and is intended to be used to decide on the level of certainty with which painful symptoms can be attributed to an underlying neurological disease.
The presentation aims at discussing the suggested novel definition and classification in light of recently published alternatives.

References

Hansson, P., Lacerenza, M. and Marchettini, P., Aspects of clinical and experimental neuropathic pain: The clinical perspective. In: P.T. Hansson, H.L. Fields, R.G. Hill and P. Marchettini (Eds.), Neuropathic pain: Pathophysiology and treatment., Vol. 21, IASP Press., Seattle, 2001, pp. 1-18.
Treede, RD., Jensen, TS., Campbell, JN., Cruccu, G., Dostrovsky, JO., Griffin, JW., Hansson, P., Hughes, R., Nurmikko, T., Serra, J., Neuropathic pain: Redefinition and a grading system for clinical and research purposes. Neurology. In press.

The following criteria should be evaluated for each patient:

1. Pain with a distinct neuroanatomically plausible distribution (a region corresponding to a peripheral innervation territory or to the topographical representation of a body part in the central nervous system)
2. A history suggestive of a relevant lesion or disease affecting the peripheral or central somatosensory system (the suspected lesion or disease is reported to be associated with pain, including a temporal relationship typical for the condition)
3. Demonstration of the distinct neuroanatomically plausible distribution by at least one confirmatory test (as part of the neurological examination, these tests confirm the presence of negative or positive neurological signs concordant with the distribution of pain. Clinical sensory examination may be supplemented by laboratory and objective tests to uncover subclinical abnormalities)
4. Demonstration of the relevant lesion or disease by at least one confirmatory test (as part of the neurological examination, these tests confirm the diagnosis of the suspected lesion or disease and the choice of tests depends on which lesion or disease is causing neuropathic pain)

   The grading of certainty for the presence of neuropathic pain was suggested as follows:
   For definite neuropathic pain all 4 criteria had to be fulfilled. For probable neuropathic pain criteria 1 and 2, plus either 3 or 4 had to be fulfilled. For the lowest level of certainty, possible neuropathic pain criteria 1 and 2, without confirmatory evidence from 3 or 4 is requested.

Dr. Isabelle Decostered

Department of Anesthesiology
Department of Cell Biology and Morphology
University Hospital Center and University of Lausanne (CHUV)
1005 Lausanne

Date of Birth	18.12.1965
Nationality	Swiss

Education & Diplomas

2006	'Privat-docente', Faculty of Biology and Medicine (FBM), University of Lausanne (UNIL)
2005	Assistant Professor, FBM, UNIL
2001	'Maître d'enseignement et de recherche' (MER-1), FBM, UNIL
1999	Board Certified in Anesthesiology, Federatio Medicorum Helveticorum (FMH), Bern
1998	Doctorate in Medicine, University of Lausanne School of Medicine
1990	Swiss Federal Diploma in Medicine, University of Lausanne School of Medicine

Research

Translational research to identify mechanisms and treatment of chronic pain; participate in and support clinical research to prevent and treat acute and chronic pain

2001	Group Leader, Pain Research Unit, Dept. of Anesthesiology and DBCM, CHUV-UNIL
2000-2001	Assistant Physician, research associate, Dept. of Anesthesiology & Surgical Research Division, CHUV, Prof. N. Gilliard and Prof. P. Aebischer
1998-1999	Senior research fellow Harvard Medical School and Massachusetts General Hospital, Boston, USA Department of Anesthesia, Neural Plasticity Research Group, Prof. C. J. Woolf
1995-1998	Doctoral Student, Division of Surgical Research and Center for Gene Therapy, CHUV

Funding

External funding: grants and subsidies for total CHF 1'935'500.- from multiple sources to I. Decosterd if not other specified: Swiss National Foundation for Scientific Research (1998 grant for young scientist, 2002 SCORE, and subsequent funding until 2009), FBM, UNIL, Pierre Mercier Science Foundation, Synapsis Foundation (coll. with H Abriel), European Society of Anesthesiology (coll. with H Abriel), International association for the Study of Pain (IASP) (coll. with RR. Ji), UPSA Pain Institute Switzerland, Swiss Society of Anesthesiology, Abbott Prize

Clinical

Follow chronic pain patients in the multidisciplinary Pain Clinic of the department

2008	Médecin associé, Dept. of Anesthesiology, Pr N. Gillard and Pr Ch. Kern
2001	Chef de Clinique, Dept. of Anesthesiology, CHUV, Prof. N. Gilliard and Prof. D.R. Spahn
1991-1998	Residency in anesthesiology, intensive care and internal medicine, CHUV and Morges Hospital

Teaching

Undergraduate:
Basic sciences, neuroscience and physiology of pain, pathophysiology of pain, management of the pain patient and pain treatment, anesthesiology to students for the schools of Medicine and Biology, ex cathedra classes as well as modules and direction of master's level work
Post-graduate:
Thesis Advisor for FBM & UNIL doctoral students: PhDs in neuroscience (2) and MDs (4)
Continuing education for first responders physicians, anesthesiologist, and post-doctoral staff

Administration and faculty positions

- Pain Research Unit: i) Plan and develop fundamental research, ii) Conduct research projects to their conclusion and direct researchers to reach successful study outcomes, iii) Obtain and manage external financing
- Pain Clinic Unit: i) Organize and coordinate activities of the Pain Clinic Unit for the multidisciplinary treatment of pain, taking into consideration the hospital's criteria for quality, safety, efficacy as well as budgetary requirements, ii) Develop the university program for the Unit, iii) Promote multidisciplinarity with different institutional partners
- Member of Boards and Committees at local and national institutions
- Scientific functions /specialist for multiple Societies at National and International level
- Ad Hoc Reviewer for indexed journals in the fields of Pain, anesthesiology and neuroscience

Douleurs chroniques: nouvelles cibles thérapeutiques?

Friday, October 24, 2008
14.00-14.30

La douleur chronique, et en particulier la douleur neuropathique est la résultante de modifications plastiques moléculaires et structurelles du système nerveux périphérique et central qui conduisent à un état maladaptatif d'hyperexcitabilité. L'étude des mécanismes neurobiologiques en jeux lors des études précliniques et cliniques a permis l'identification de nouvelles cibles thérapeutiques. En particulier, nous présenterons l'implication de sous-unités de canaux sodiques - spécifiques pour le système douleur - générant un influx anormal et contribuant à l'activation neuro-inflammatoire de la glie spinale. De multiples étapes restent encore à franchir pour l'identification des mécanismes et le développement de molécules thérapeutiques. Toutefois, le fait de cibler ces mécanismes afin de restaurer une fonction normale au système nerveux nous fait considérer le contrôle de la douleur sous un autre angle que celui de l'analgésie pure qui elle ne vise qu'à l'atténuation du symptôme douleur.

Prof. Dr. Robert Theiler

Chefarzt Klinik für Rheumatologie und Rehabilitation
Klinik für Rheumatologie und Rehabilitation
Stadtspital Triemli
Birmensdorferstr. 497
8063 Zürich

Im Triemlispital

Seit 1.6.2002
Sprachen: D, F, E

Aktuelle Tätigkeit

Chefarzt an der Klinik für Rheumatologie und Rehabilitation des Stadtspitals Triemli
Präsident der Ethikkommission der beiden Stadtspitäler Waid und Triemli
Lehraufträge an den Universitäten Basel und Zürich

Ausbildung

1958	in Zürich geboren
	Grundschulen in Zürich-Albisrieden
1977	Mittelschulzeit am Kollegium Engelberg (Matura Typ B)
	Studium der Medizin in Zürich
1984	Staatsexamen
	Facharzttitel: FMH Rheumatologie
1994	FMH Physikalische Medizin und Rehabilitation
2002	Habilitation an der Universität Basel

Berufliche Erfahrung

1985-1993	Assistenzarztzeit, unter anderem am Lähmungsinstitut Leukerbad, am Stadtspital Triemli Zürich (Chirurgie), an der Rheuma- und Rehaklinik in Zurzach, an der Klinik W. Schulthess Zürich (Neurologie), am Universitätsspital Zürich (Innere Medizin und Rheumatologie) sowie am Royal North Shore Hospital in Sydney.
1994-1996	Oberarzt an der Rheumatologischen Klinik des Felix Platter-Spitals Basel.
1996	Chefarzt der Rheumaklinik und des Instituts für Physikalische Medizin und Rehabilitation am Kantonsspital Aarau.

Forschungsschwerpunkte im Bereich der Osteoporose, Arthrose und des klinschen Qualitätsmanagements in der Rehabilitationskette von Erkrankungen des Bewegungsapparats. Langjährige Erfahrung mit klinischen Studien zur Entwicklung neuer und sicherer Schmerzmittel.

Besondere Interessen

Arthrose, Osteoporose, Qualitätsmanagement

Electronic data capturing (EDC) in the musculosceletal pain management

Friday, October 24, 2008
14.00-15.30

In the past the documentation of pain levels and disability was performed by paper or booklets. There is growing interest in collecting this important patient information by electronic data capturing eg palmtops or internet in recent years. The process is mainly driven by clinical studies where the CRF data is also entered electronically.

An overview of these activities in Switzerland will be given with a special focus on the QUALITOUCH method. The history of the development of validated patient questionnaires will be discussed. The problems of the application of electronic data capturing into clinical practice will be reviewed. In addition future trends such as the trend of documenting not only the pain levels but also the disability levels according to the ICF model will be discussed.

Dr. med. Antonia Johanna Klöpfer

Fachärztin für Anästhesiologie
Oberärztin
Kantonsspital Nidwalden
6370 Stans

Berufliche Tätigkeiten

Seit 2007	Oberärztin Schmerztherapie Kantonsspital Nidwalden
2005 – 2006	Praxistätigkeit Schmerzzentrum Polymedes Zürich
2001 – 2005	Spezialärztin und Oberärztin am Institut für Anästhesiologie,Schmerzklinik Schweizer Paraplegiker Zentrum Nottwil, LU
1993 – 2001	Assistenzärztin der Klinik für Anästhesiologie und Intensivmezin, Marienhospital Stuttgart, Baden-Würtemberg
1991 – 1993	Assistenzärztin der Chirurgischen Klinik Ludwigsburg, Baden-Würtemberg, Praxisassistentin Allgemeinmedizin

Aus- und Weiterbildung

- Regelmässiger Besuch wichtiger nationaler und internationaler Schmerzkongresse
- Hospitationen bei Dr. M. Baumann, Physikalische Medizin und Rehabilitation, Manuelle Medizin, Cross Klinik, Merian Iselin Spital, Basel, 2006
- Facharztprüfung im Bereich Spezielle Schmerztherapie vor der Deutschen
- Ärztekammer, Juni 2005
- 3-jährige Ausbildung Manuelle Medizin, Schweizerische Ärztegesellschaft für Manuelle Medizin mit Fähigkeitsausweis seit 2005
- Ausbildung in interventioneller Schmerztherapie 2001-2004 bei Prof. M. Sluijter, Nottwil, Schweiz
- Postgraduate Training, International Cadaver Courses on Interventional Pain Management, Januar- September 2003, Prof. Reiz, Lausanne
- 80 stündige Weiterbildung 'Spezielle Schmerztherapie' Deutsche Schmerzgesellschaft, 1999
- Dozententätigkeit in der Fachschwesternausbildung
- 3- jährige Akupunkturausbildung, Deutsche Ärztegesellschaft für Akupunktur, Diplomabschluss 1999
- Anerkennung als Ärztin für Anästhesiologie 1998
- Anerkennung als Praktische Ärztin 1995
- Flug/Rettungsärztin der Deutschen Rettungsflugwacht, ATLS- und ACLS- Kurse
- Seit 1992 Fachkundeausweis Notfallmedizin, langjährige regelmässige Tätigkeit als Notärztin
- 1990 Staatsexamen mit Schwerpunkt Neurologie

Persönlich

Kind: ein Sohn, geb. 2004
Nationalität: deutsch

Mitgliedschaften

- Schweizerische Gesellschaft zum Studium des Schmerzes SGSS
- Deutsche Gesellschaft zum Studium des Schmerzes DGSS
- Deutsche Gesellschaft für Schmerztherapie DGS
- Swiss Society of Interventional Pain Medicine SSIPM
- Schweizerische Ärztegesellschaft für Manuelle Medizin SAMM
- International Spine Intervention Society ISIS
- Verbindung der Schweizer Ärztinnen und Ärzte FMH
- Schweizerische Gesellschaft für Allgemeinmedizin SGAM
- Bund Deutscher Anästhesisten BDA

Schulen/Universitäten

1989 – 1990	Studium an der Ruprecht – Karls Universität Heidelberg
1986 – 1988	Studium an der J. W. v. Goethe – Universität Frankfurt
1983 – 1985	Medizinstudium an der Université de l'Etat, Mons, Belgien
1981 – 1982	Studium der Romanistik an der Universität Stuttgart und Reisen in Afrika
1972 – 1981	Gymnasium mit Abschluss Abitur

Qualitätssicherung in der Schmerztherapie

Friday, October 24, 2008
14.00-15.30

Das Dokumentation –und Qualitätssicherungssystem in Deutschland

Der Deutsche Schmerzfragebogen ist das von der Deutschen Gesellschaft für Schmerztherapie (DGS) und der Deutschen Gesellschaft zum Studium des Schmerzes (DGSS) gemeinsam entwickelte Standardinstrument zur qualitätsoptimierten Dokumentation schmerztherapeutischer Massnahmen im praktischen Alltag.

Zusammen mit anderen Zusatzinstrumenten (Deutsches Schmerztagebuch, Zwischendokumentation, Kurzfragebogen Akutschmerz) repräsentiert der Deutsche Schmerzfragebogen gegenwärtig eines der weltweit fortschrittlichsten validierten Dokumentatiosstools für den schmerztherapeutischen Alltag.

Der Deutsche Schmerzfragebogen wurde im Rahmen umfangreicher Untersuchungen unter Alltagsbedingungen evaluiert und erfüllt die Anforderungen an die standardisierte Verlaufsdokumentation gemäss der Qualitätssicherungsvereinbarung mit den Kranlenkassen, sowie die Voraussetzungen für qualitätsabhängige Vergütungsregelungen in der Schmerztherapie in Deutschland.

Prof. Dr. Menno E. Sluijter
Consultant, Institute for Anesthesiology and Pain
Swiss Paraplegic Center, Nottwil

Guggistrasse 12A
6005 Luzern

Born in Haarlem, the Netherlands, July 31, 1932

Training

	Secondary school: Gymnasium, Haarlem, the Netherlands
1949 – 1957	Study Medicine: University of Amsterdam
1957 – 1959	Various trips as a ship's doctor
1959 – 1963	Anesthesiology training: University of Amsterdam

Professional career

1963	Thesis on hyperbaric oxygen for carbon monoxide poisoning
1963 – 1964	Staff member, Massachusetts General Hospital, Boston, MA
1964 – 1969	Senior staff member, Wilhelmina Gasthuis, Amsterdam
1969 – 1978	Assistant professor of experimental anesthesiology, university of Amsterdam
1973 – 1989	Pain practice, Lutherse Diakonessen Ziekenhuis
1989 – 1998	Professor of invasive treatment of pain, Maastricht University
1989 – 1998	Pain practice, BovenIJ ziekenhuis, Amsterdam
1999 – present	Consultant, Pain department, Swiss Paraplegic Center, Nottwil, Switzerland

Publications and inventions

	Numerous publications on radiofrequency
1991	Intradiscal heating
1996	Pulsed radiofrequency
2001 / 2003	Books: Radiofrequency, part 1 and part 2

Awards

- Knight in the order of the Dutch Lion
- Noordenbos award, Dutch society for the Study of pain
- Honorary member, Dutch society of anesthesiologists
- Moricca award, Italian society for the study of pain
- Honorary member, Catalan Pain Society

Personal

- Divorced, 2 grown up children

Pulsed radiofrequency in pain treatment

Friday, October 24, 2008
14.30-15.00

Classical, continuous radiofrequency (CRF) has been used for decades in the treatment of pain. It was supposed to destroy nerves conducting noxious stimuli. This model for the mode of action could not be maintained when it appeared that CRF lesions distal to the nociceptive focus could relieve pain as well. That is why pulsed radiofrequency (PRF) was introduced in 1998.

During PRF 20 msec pulses are applied at a fixed voltage. The power deposition is then strongly dependent from the impedance, which is variable. The mean tip temperature depends on power deposition and heat washout, and is therefore variable too. It is customary to adjust the power input if the mean temperature rises over 42 0C. Various methods are now used to do this.

As for the mode of action, we must discriminate between the physical parameter that initiates the clinical effect, and the analgesic effect that follows. PRF has a mildly destructive effect that may be due either to the strong electric fields near the electrode tip or to the heat spikes during the pulse. It is unlikely however that destruction plays a role in the mode of action. Initiation by low strength electric fields is presently the most probable hypothesis. The analgesic mechanism has not been cleared up yet. Investigations so far have understandably concentrated on the nervous system, but recently new findings have become available, suggesting that this focus may be too narrow. PRF appears to have an effect on a broader range of cells, and also an anti-inflammatory effect may play a role.

Clinical applications include the classical applications involving the nervous system, regional applications and more recently local applications that are directed at the source of the pain. As for the nervous system applications, the medial branch is mostly treated with CRF, but PRF is more suitable for the dorsal root ganglion and for peripheral nerves. Regional application with transcutaneous PRF is still under investigation. Local applications include intraarticular and intradiscal application and the treatment of tendinitis and trigger points.

Future developments may include an adaptation of the parameters that are presently used, and new targets that follow from new concepts of pain.

Dr. Valerie Piguet

Anesthesia & Clinical Pharmacology
Pain Center
Hôpitaux Universitaires de Genève
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1211 Genève 14

FMH pharmacologie et toxicologie clinique,
FMH anesthésiologie
Médecin adjoint, responsable du Centre multidisciplinaire de la douleur, Hôpitaux Universitaires de Genève

Pharmacological treatment of breakthrough pain

Friday, October 24, 2008
14.30-15.00

In patients with chronic persistent pain, breakthrough pain is described as a transitory pain that lasts from seconds to hours, with a higher intensity than background pain and with negative effect on function or quality of life. Although the assessment of breakthrough pain is similar to the assessment of background pain, it should be differentiated to ascertain the etiology: spontaneous pain, incident pain or end-of-dose failure. The various complications resulting from breakthrough pain should also be carefully evaluated before establishing the management strategy.

Most of the studies reported in the literature involved cancer pain patients with opioids. Thus the recommendations for symptomatic pharmacological of breakthrough pain include classically modifications of the background around-the-clock opioids as well as the use of rescue analgesics. This implies a detailed knowledge of the opioids pharmacokinetics related to their different routes of administration. In chronic non-cancer pain the level of abuse risk and the establishment of a monitoring program that is matched to and shared by the patient should also be considered.

Dr. Armin Aeschbach

Facharzt FMH für Anästhesiologie
Witellikerstrasse 40
8032 Zürich

Dr. med. Armin Aeschbach is an anaesthesiologist by first training. In 1993 he started in the field of chronic and cancer pain management at the University Hospital of Basel.

1996- 1999 he specialized as a Clinical Fellow at the Univ of Texas, San Antonio and the Cleveland Clinic, Cleveland, USA.

Back in Switzerland, Dr. Aeschbach was the Head and later Consultant at the Department of Anesthesia at the Univ. of Basel.

Together with spine surgeons he went into part-time private practice at the Clinic Hirslanden in Zürich in 2002.

2004 he started his second University consultant position at the Institutes of Rheumatology and Anesthesia at the University Hospital of Zürich.

Spinal Cord Stimulation (SCS) in the Treatment of Chronic Pain

Friday, October 24, 2008
15.00-15.30

Spinal Cord Stimulation is a non-destructive surgically minimally invasive technique used mainly in the treatment of pain of neuropathic, increasingly also of ischemic origin.

Electrical neuromodulation is also applied at the brain level (motor cortex , deep brain) as well as at the peripheral nerve level (occipital nerve).

Electrical neuromodulation is also used for functional purposes: tremor, epilepsy, urinary and bowel incontinence etc.

The principle of SCS consists of inserting one or more electrodes into the spinal canal at the desired level of the dorsal columns so that electrical field generation creates stimulation paresthesiae overlapping maximally the area of the patient's pain. If a test of usually several days to a week is successful a pulse generator is implanted subcutaneously and connected to the electrode.

When indicating this technology the patient's entire biopsychosocial context must be looked at very carefully: interdisciplinary evaluation is mandatory including the pain management physician, surgeon and psychiatrist/psychologist.

The scientific literature on SCS is still rather scant: there are few high-quality studies, but mostly case reports. The perfect study on SCS is impossible, however, as clinically perceptible sham-stimulation and thus the classical double-blind randomized study are impossible to do. The handful of metaanalyses show an efficacy of SCS of around 50% of pain relief at 3-5-10 years after implant, depending on the cause of pain.

Complications of SCS are frequent: roughly 1/3 of patients need revision surgery during the lifetime of their implant.

The cost of SCS is very high, but over 10 cost-efficacy studies document that on the average at 3 years after the implant cost is equalled by savings in: pain medications, utilization of health care resources (physician visits, surgeries, diagnostic and therapeutic procedures) as well as (partial) upkeep of employment, potentially saving large amounts of compensation payments and pensions.

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Head of the Anaesthesia and Pain Management Dptmt & Neuromodulation Centre, Hôpital de Morges,
Consultant in Anaesthesia, University Hospital, CHUV, Lausanne, Switzerland

Publications in peer reviewed journals (total 47), grants (peer reviewed) 10

Publications in non-peer reviewed journals (9), Chapters in books and monographies (4)

Abstracts and posters (more than 80), invited speaker (total more than 100)

Teaching: Examiner at the Diploma of the European Academy for Anaesthesiology; European Academy Examination board (1989); Chairman of the European Diploma of Anaesthesia and Intensive care examination Part II (Viva)

Spinal cord stimulation: what is the evidence?

Friday, October 24, 2008
15.00-15.30

Spinal cord stimulation (SCS) and related neuroaugmentative techniques are increasingly used in the treatment of intractable pain of neuropathic or vascular aetiology as well as functional disorders[1].
The understanding of the mode of action of SCS is not entirely elucidated, though it is now clear that neuro-humoral as well spinal and supra-spinal gating mechanisms play a significant role[2]. As data on the efficacy and safety of SCS have accumulated over the past 10 years, the medical community has become more aware and supportive of neuromodulation techniques. Because of high prices and inappropriate reimbursement policies, the use of SCS techniques is still relatively limited, even though a number of studies suggest that these treatments are cost-effective when compared to an alternative conventional management[3,4].
There is increasing evidence that SCS is effective in relieving neuropathic low-back and leg pain[5,6] including chronic pain following corrective back surgery[7]. Others studies indicate that pain relief is accompanied by an increase in spontaneous physical activity[8] and improved quality of life[9].
In addition, high quality controlled studies have established the remarkable efficacy of SCS in controlling pain due to refractory angina[10-12] or complex regional pain syndrome[13,14]. In peripheral vascular disease, ischemic rest pain responds well to SCS[15] and can delay or prevent lower limb amputation in properly selected patients[16].
In conclusion, SCS is no more regarded as mysterious or esoteric but has truly come of age as a standard of medical practice, from both the standpoints of efficacy and cost utility.

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Personal

Born in Turkey; 19.10.1954

Professional

1978	Graduated from Cerrahpasa Medical Faculty of Istanbul University
1982	Completed residency in the Department of Anesthesiology and Reanimation of Medical Faculty of Istanbul, Istanbul University
1986	Associate Professor in Anesthesiology
1991	Professor of Anesthesiology and Algology
since 1990	Professor and Founder and Chairman of Department of Algology

Scientific

1981	Member of IASP
	Founder and President of Turkish Society of Algology
	Founder and Former President of Turkish Society of Regional Anesthesia
	Former Turkish Representative in European Society of Regional Anesthesia
	Former Member of the executive Board of Neuromodulation Society
1996-1999	Treasurer of EFIC
1999-2002	Honorary Secretary of EFIC
2002-2005	President Elect of EFIC
2005-2008	President of EFIC
1994	Founding member of World Institute of Pain-WIP
1994-1999	General Secretary of WIP
1999-2002	Vice President of WIP
2005-2008	President Elect of WIP
2008-2011	President of WIP
2005-2008	Chair of Board of Examination – WIP
2007-2011	Member of the WHO Advisory Expert Panel on Drug Dependence
	Member of the editorial Board of European Journal of Pain
	Member of the editorial board of Pain Practice
	Member of the editorial board of Pain Physician
	Editor of Turkish Journal of Pain-cited in index medicus
1991	Awarded as the Young leader in medicine/Turkish Jaysees
	Invited speaker in 120 lectures on international level
	Invited speaker in 200 lectures on national level
	Author of 25 books in Turkish
	Editor-co editor of 7 books in English

Author of 200 articles in international or national level mainly on interventional pain management
Organizer of 15 National Congresses on Pain Medicine in Turkey
1996 Organizer of World Congress of World Society of Pain Clinicians ,Istanbul
1999 Organizer of the Annual Congress of European Society of Regional Anesthesia, Istanbul
2001 Organizer of 3rd World Congress of World Institute of Pain, Istanbul
2006 Organizer of the Pain in Europe V, triennial Congress of EFIC, Istanbul

Percutaneous Interventions for Trigeminal Neuralgia

Friday, October 24, 2008
16.00-16.30

Introduction

History

Percutaneous transovale approach to the Gasserian Ganglion using absolute alcohol was first defined by Hartel in 1912 (3). In the evolution of the treatment, radiofrequency lesioning for this ganglion was described by Sweet in 1965 (4), retrogasserian glycerol injection by Hakanson in 1981 (5), and percutaneous baloon compression by Mullan and Lichtor in 1978 and published in 1983 (6).

Anatomy

The trigeminal nerve is the largest one among the cranial nerves. Sensation of the oral mucosa, anterior and middle cranial fossa, tooth pulp, surrounding gingiva and periodontal membrane is maintained by the trigeminal nerve. It originates from the gasserian ganglion named after a Viennese anatomist, Johann Laurentius Gasser.

Patient selection

Besides idiopathic trigeminal neuralgia, secondary neuralgic pain due to facial pain resulting from terminal cancer or multiple sclerosis may also be treated with these approaches.

Technique of the Trigeminal ganglion block

The technique to enter the foramen ovale is the same for all approaches as it was defined by Hartel. The procedure should be performed under biplane fluoroscopic control which facilitates the manipulation of the needle into the foramen ovale. The direction of the needle should be verified under flourouscopy in submental, lateral and AP direction. To obtain the submental view, the C arm of the fluoroscopy is first placed on the AP direction. If the flouroscopy is oriented in the AP direction down the orbitomental line the petrous ridge may be visualised through the orbits. The target site in this dimension is a point approximately 9 mm-1 cm. Medial to the lateral rim of the internal auditory meatus. This usually coincides with the medial extent of a dip that occurs in the petrous ridge.
When the needle enters the foramen the the flouroscopy is placed laterally. The lateral image intensifier view should reveal that the needle is directed toward the right angle produced by the clivus and the petrous ridge. The lateral view is important to verify the dept of the needle inside the Meckel cavity. Aspiration test is mandatory.
There are three percutaneous techniques for the treatment of trigeminal neuralgia:

a. Radiofrequency thermocoagulation of the branches of the trigeminal nerve
b. Retrogasserian glycerol injection
c. Baloon compression

Radiofrequency lesioning of the ganglion

Several types of electrods may be used for lesioning; these are cordotomy type electrods, trigeminal electrods and the tew curved electrod and Finch Racz curved blunt electrode.

a. Trial stimulation

When the needle enters the foramen ovale,the patient is ready for trial stimulation.

In many of the patients the third division is effected.The mandibular nerve has some motor fibres. If the nerve is stimulated at 2 hz with 0.1-1.5 volts the muscle contraction of the lower mandible will be observed.This is also a way of verifying that the needle is passed through the foramen ovale and is in the retrogasserion rootlets.If the first and second divisons are affected, there is no motor response.

The second stage is to seek for paresthesia for proper localization. A stimulation at 50-100 hz is given with 0.1-0.5 volts. If the needle is properly localized there will be tingling like sensation or electric like paresthesias in the face. If this response is recieved after 0.5 volts the needle should be redirected to get the same response at a lower voltage. However it should be kept in mind that there may be residual sensorial deficits from the previous lesionings that the sensorial threshold may be higher.

When adjusting the electrod for localization it should also be remembered that the gasserian ganglion and its retrogasserian rootlets lie on a plane running from superomedial to inferolateral.If there is motor response it means that the needle is too medial and for a better response it should be more lateral.

After the stimulation is completed the needle should again be aspirated to verify that the needle is inside a vessel. If blood is aspirated, the needle should be replaced. If still blood is aspirated the procedure should be terminated for a second attempt in another day. Impedance monitoring is not essential for trigeminal lesioning but if used it should be 150-350 ohms for rootlets bathing in the csf and 1000 ohms if it is in a tissue.

b.RF lesioning

The rf lesioning must be done under sedation with monitorization of the vital parameters.

If the needle is properly placed and stimulation is received at the effected nerve distribution the patient is ready for lesioning. One should wait at least for 30 seconds to RF lesioning.RF lesioning is done at 60 degrees for 60 seconds. It may be repated again up to 70 degrees.

If more than one branch of the trigeminal nerve is affected several lesionings by repositioning the needle should be performed. After each repositioning the stimulation tests should be repeated to seek for paresthesia at the desired site.

For the first division lesioning corneal reflex should be controlled in each lesioning and lesioning should begin from lesser degrees to preserve the corneal reflex.

After the lisioning is completed the needle is removed. Patient is instructed to watch for any swelling of the face and put ice on the face to decrease it.

Cold towels or ice are applied to the face in order to prevent swelling of the face due to the penetration of the needle throught the cheek and inflamatory response.

Complications

Somplications are the same as with glycerol injection. Reduction or loss of facial sensation occur in most of the patients. In fact radiofrequency lesioning is based on a complication that the patient will feel facial numbness for a certain period of time which is not predictable.

Anesthesia dolorosa, keratitis, occulomotor and abduccens palsy, minor masticatory weakness may be observed.

Technique for retrogasserian glycerol injection

The patient is placed in supine position. The needle should pierce the foramen just anterior to its geometric center in order to place the needle into the trigeminal cistern. The needle is advanced until free flow of the cerebrospinal fluid is observed. The patient is then placed in the semisitting position, and the neck is flexed.Contrast dye, (omnipaque 0.1- 0.5 ml) is injected at this position to the cistern.

Failure of visualisation or diffusion of the dye shows wrong placement of the needle. Then the needle must be repositioned.

When the cistern is visualised, the contrast dye material is drawn back by free flow. The flow of the dye is slower than the csf itself. Same amount of glycerol is injected to the cistern. The patient is kept at the same semisitting position for the next

two hours. Because this injection may cause severe headache, or dysesthesia may be seen, the patient should be warned prior to injection. Some patients may get benefit immediately while some patients get pain relief in two weeks time.

Complications

Complications of retrogasserian glycerol injection are paresthesia, dysesthesia, anestesia dolorosa, corneal hypesthesia or anesthesia, diminished corneal reflex, keratitis, masticatory weakness.

Percutaneous baloon compression

Technique

The procedure is performed under light general anesthesia. The position of the patient is as it is with Radiofrequency lesioning. The needle is introduced as it was already described through the foramen ovale. A four french fogarty catheter is advanced through the needle to the cave. The baloon of the catheter is advanced by injecting 15-20 mm of contrast solution. The shape of the ballon inside the cave with lateral position resembles a pear shape. Although there is still no agreement on the duration the inflated ballon is left there for 60 seconds or more although there is no agreement on the duration. The procedure should be realized under monitoring of the vital parameters because bradycardia and hypertension may be observed.

Complications

Significant masseter weakness is a common complication especially at the inital period. This weakness generally disappears within the first three months. Hypesthesia, dysesthesia, anestesia dolorosa, balloon failure, heamatoma on the cheek, may also be observed.

Followup of the patient

The immediate and late follow up of the patient is very important. Some authors prefer to do the lesioning on the outpatient basis and some hospitalize for a day.

In some patients there is immediate pain relief but the next day or within the first week the pain may arise again. In such patients lesioning may be repeated.

Complications

Percutaneous interventions related with the trigeminal nerve are not freecomplications. The complications of percutaneous lesioning are as follows; Annoying disesthesia and anesthesia dolorosa, loss of corneal reflex, neurolytic keratitis, visual loss, retrobulbar hematoma, hematoma in the cheek, significant motor root deficit, carotid puncture, meningitis, inadvertent intracranial placement of the electrod resulting intracranial hemorrhagia, penetration through the wrong foramen causing defects in the other cranial nerves.

Conclusions

All three percutaneous techniques may be used in to block the trigeminal nerve in the treatment of neuralgic pain of the face. There are advantages and disadvantages of every technique.

Among these techniques radiofreqency lesioning has still the highest rate of initial pain relief although facial numbness may be annoying for the patient. Lesioning of the first branch is not always easy, however using different electrods to approach the first branch may be helpful. The method can be repeated in case of recurrence.

Retrogasserian glycerol injection is also an effective method but the inital pain relief and duration of pain relief is less than radiofrequency lesioning. It may easily be applied when radiofrequency facilities are absent. Partial sensorial loss may also develope with this technique. Fibrosis may develope at the entrance of foramen ovale enhancing further injections.

Percutaneous ballon compression causes mild sensory loss in the majority of cases. However it is not possible to restrict comperssion to a single division. It is not as frequently used as other techniques.

All these techniquebs are less morbid and more cost effective than open surgical techniques. However each technique must be applied in precise indications, in well equipped centers with experienced hands.

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Dr. Philippe Mavrocordatos

Anesthesiology
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Current Positions

Since 1999	Director Centre de la Douleur and staff anaesthesiologist Clinique Cecil, Lausanne
Since 2003	Médecin Associé Interventional Pain Unit, Dept. of Anesthesiology HUG, Geneva
Since 2002	President of the "Pain Fondation"
Since 2005	Vice-president "Swiss Society of Interventional Pain Medicine" (SSIPM)
Since 2006	Associate Professor in Anaesthesiology and Pain management Mahidol Medical School, Bangkok University, Thailand
Since 2007	Chairman Swiss section of the World Institute of Pain (WIP)
Since 2008	Examiner and Lecturer WIP, FIPP, examination
Since 2006	Member Advisory Board, ESAI inc. Japan
Since 2008	European Key Opinion Leader Stryker, USA
Since 2008	European Key Opinion Leader ANS, St. Jude, USA

Management de la qualité dans un centre interdisciplinaire de traitement de la douleur

Friday, October 24, 2008
16.00-16.30

La notion de management de la qualité est une notion vague et rébarbative, facilement assimilée à une forme supplémentaire de contrôle de nos activités au sens administratif du terme. Un regard plus subtil et moins méfiant, laisse entrevoir les possibilités d'analyse et le progrès potentiel que l'application de cette norme représente. La mise en place d'une telle organisation procède en 6 périodes : Analyse, Elaboration du Système de Management de la Qualité (SMQ), Mise en œuvre du SMQ, Audit interne, Certification et finalement Maintenance du système.

1. L'analyse est une phase cruciale de la démarche puisqu'elle décrit le fonctionnement instantané d'un système et comptabilise la somme des activités réalisées, les lieux de production, les flux d'information, de matières, de personnes. C'est durant cette phase que sont élaborées les procédures (description précises de l'activité).
2. La phase d'élaboration nécessite de nombreuses réunions et discussions qui aboutissent au développement de l'architecture du système et des processus. On y définit également les tâches et les responsabilités.
   Un questionnaire de mesure de la satisfaction des patients est également élaboré.
3. La mise en œuvre d'un système de management de la qualité débute par l'application des procédures élaborées en y intégrant parallèlement l'enregistrement et la traçabilité des activités.
4. Un audit interne a permet d'évaluer ce travail. Cet audit est effectué par une personne qualifiée en management de la qualité et établit un état des lieux avant l'examen final que représente la certification de l'organe de surveillance choisi.
5. Finalement la certification est accordée lorsque l'analyse du système démontre conformité de la structure aux normes ISO.
6. Le maintient du système de qualité passe par une analyse régulière du système et des activités cliniques.

L'impact de cet important travail sur notre quotidien est fondamental. Le mode de fonctionnement, d'organisation est plus structuré, la traçabilité des activités est assurée et de ce fait la sécurité de nos patients est accrue. La planification est améliorée.
Fondamentalement les personnes impliquées dans ce processus de qualité ont développé une attitude orientée vers l'amélioration continue.

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Swiss Paraplegic Center, Nottwil

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Born in Haarlem, the Netherlands, July 31, 1932

Training

	Secondary school: Gymnasium, Haarlem, the Netherlands
1949 – 1957	Study Medicine: University of Amsterdam
1957 – 1959	Various trips as a ship's doctor
1959 – 1963	Anesthesiology training: University of Amsterdam

Professional career

1963	Thesis on hyperbaric oxygen for carbon monoxide poisoning
1963 – 1964	Staff member, Massachusetts General Hospital, Boston, MA
1964 – 1969	Senior staff member, Wilhelmina Gasthuis, Amsterdam
1969 – 1978	Assistant professor of experimental anesthesiology, university of Amsterdam
1973 – 1989	Pain practice, Lutherse Diakonessen Ziekenhuis
1989 – 1998	Professor of invasive treatment of pain, Maastricht University
1989 – 1998	Pain practice, BovenIJ ziekenhuis, Amsterdam
1999 – present	Consultant, Pain department, Swiss Paraplegic Center, Nottwil, Switzerland

Publications and inventions

	Numerous publications on radiofrequency
1991	Intradiscal heating
1996	Pulsed radiofrequency
2001 / 2003	Books: Radiofrequency, part 1 and part 2

Awards

- Knight in the order of the Dutch Lion
- Noordenbos award, Dutch society for the Study of pain
- Honorary member, Dutch society of anesthesiologists
- Moricca award, Italian society for the study of pain
- Honorary member, Catalan Pain Society

Personal

- Divorced, 2 grown up children

Immunology and pain

Friday, October 24, 2008
16.30-17.00

Even the most primitive organisms have an immune defense against toxins and against traumatic events. The cytokines that are involved are identical to the ones that are found in higher organisms. Initially the signaling function was performed by the cytokines, but through the evolution the need arose for a more efficient system. This is how the nervous system was developed, initially as an offspring of the immune system.
That close relationship has never changed. In primates there is an intimate exchange between the nervous and the immune system, for example in metabolism, in the exchange of information and in the overlap of function. Immune cells have a memory and they can transmit signals through calcium waves.
The basic function of the immune system is a balance between inflammation and anti-inflammation. Inflammation is the basic response to disturbances of the homeostatic environment, including stress, but if inflammation persists for too long it may easily be more deleterious for the organism than the original disturbance. Anti-inflammatory action is therefore essential.
In the 70-ties it was thought that anything that the immune system did was good for the organism. This assumption proved to be wrong. Malfunctioning of the immune system even turned out to be the majot cause of disease and death. Notably failure to mobilize sufficient ant-inflammatory action may cause a chronic state of low-grade inflammation, and this is responsible for a long list of diseases, from coronary disease to stroke and from depression to dementia.
Low-grade inflammation also plays a major role in pain syndromes such as arthrosis, neuropathic pain, discogenic pain, herniated disc, pain after spinal cord injury, CRPS, and tendinitis. Here is where PRF comes in. An anti-inflammatory effect has now been demonstrated in a number of patients, but on the other hand not every pain syndrome where PRF is effective has an inflammatory basis.
It seems that we have to get used to the idea that nervous and immune system form an inseparable unit, to get a better idea of pain and pain treatment. Such a unit fulfills the criteria of chaotic systems. Chaotic systems have a number of characteristics, and these bring us closer to an understanding of the action of PRF. This view also provides a direction for further development.

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Academic Appointment	Full Professor
Clinical Appointment	Chief-of-Staff Anesthesiology
Special expertise	Regional Anesthesia, Intravenous Anesthesia, Pain Management
Languages	French, German, English
Graduate 1973	Federal High School Diploma – Typ C

Postgraduate

1974-80	Medical School, University of Lausanne
1980	Federal Diploma of Medicine, University of Lausanne
1981	Educational Commission for Foreign Medical Graduates (ECFMG) received in Geneva
1981	Certificate for Atomic Absorption Spectroscopy, received in Luzern
1985	PhD from the University of Lausanne
1988	Diploma of the Swiss Association of Anesthesiology and Reanimation
1988	Doctorate FMH for Anesthesiology
1989	Diploma for Intensive Care Medicine, (Schweizerische Gesellschaft für Intensivmedizin)
1989	European Diploma for Intensive Care Medicine
1991	Doctorate FMH for Intensive Care Medicine
1994	Associate Professor, Medical School, University of Geneva
1999	Associate Professor, Medical School, University of Zurich
2001	Professor, Medical School, University of Zurich
2003	Academician Member of the European Academy of Anesthesiology
2003	Visiting Professor University of Toronto General Hospital
2004	Associate Editor of the Journal Anesthesiology
2004	President of the Commission of Regional Anesthesia of the Swiss Society of Anesthesia and Reanimation
2005	Editor of the Journal Anesthesiology
2006	Full Professor Regional Anesthesia University of Zurich
2007	Membre du groupe d'experts de la SFAR sur les NVPO
2007	Visiting Professor General Hospital, Taipei, Taiwan
2008	Visiting Professor UPMS Shadyside Hospital, Pittsburgh, USA

Conferences More than 250 invited lectures held at International congresses and meetings

Scientific publications

- More than 200 scientific publications
- 89 Peer reviewed publications

Opioid induced Hyperalgesia

Friday, October 24, 2008
16.30-17.00

Opioids are the cornerstone therapy for alleviating moderate to severe pain. Whereas opioids have long been used for alleviating acute and cancer-related pain, they recently have gained significant popularity for the treatment of chronic non-malignant pain. Common concerns regarding the use of opioids are the potential for detrimental side effects, physical dependence, and addiction. However, recent research suggests that opioids may yet cause another problem, often referred to as opioid-induced hyperalgesia (OIH). Patients receiving opioids to control their pain somewhat paradoxically may become more sensitive to pain as a direct result of opioid therapy. That is, the use of opioids may be a double-edged sword. They provide straight analgesic and anti hyperalgesic effects initially, but subsequently are associated with the expression of hyperalgesia likely reflecting upregulation of compensatory pronociceptive pathways.

The presence of hyperalgesia has a major impact on primary and secondary pain processing by the brain, with these changes having the potential to be both adaptive and mal-adaptive. These alterations may be detrimental in the early postoperative period for a number of reasons. First, hyperalgesia tends to increase the amount of pain the patient experiences – an unwanted outcome of itself – because of greater amplification of given noxious inputs. Second, more pain typically means more patient stress in the postoperative period, with the possibility of negative consequences for a variety of complications and outcomes. Finally, abnormal persistence of nervous system sensitization subsequent to nociception, i.e., excitatory neuroplasticity expressed as hyperalgesia and increased pain, is now considered a major candidate mechanism for the development of chronic pain[1,2].

The reliable diagnosis of hyperalgesia is difficult based on clinical symptoms alone. The very definition of hyperalgesia – more pain accompanying a given stimulus - makes it clear that its detection is based on construction and comparison of stimulus-response curves before and after nociception or drug application. Therefore, the systematic diagnosis and quantification of hyperalgesia requires the formal, serial determination of stimulus dose response curves under standardized conditions, a process termed quantitative sen-sory testing (QST). If postoperative hyperalgesia is not diagnosed, it will not be subject to targeted treatment, which fact may – as will be discussed below – be a contributing factor to the lack of substantive progress in postoperative analgesia mentioned above[3].

The circumstances under which opioid-induced hyperalgesia may occur are not entirely understood but may include high doses, long-term treatment, or abrupt changes in concentrations. Recent observations on changes in neurotransmitter release following acute and chronic exposure to opioids provide potential solutions to comprehension of opioid induced hyperalgesia[4]. Opioids do not excite descending fibres directly but disinhibit them by inhibiting spontaneous GABA release from local GABAergic interneurones. Rebound adenylyl cyclase activity in withdrawal may be the fundamental step in eliciting the withdrawal behaviour. Neuropathic pain and opioid induced hyperalgesia have common pathophysiologic mechanisms. Among these neural mechanisms, the central glutaminer-gic system plays a pivotal role and N-methyl-d-aspartate (NMDA) receptor has been shown to be critical in the cellular mechanism of opioid-induced pain sensitivity. Perioperative opioids may increase postoperative pain and opioid requirements[5].

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5. Guignard B, Bossard AE, Coste C et al. Acute opioid tolerance: intraoperative re-mifentanil increases postoperative pain and morphine requirement. Anesthesiology 2000;93:409-17.

Prof. Dr. Eli Alon

Facharzt FMH für Anästhesiologie
Professor für Anästhesiologie
Universität Zürich
Konsiliararzt Universitätsspital Zürich
Praxis für Schmerztherapie
Bederstrasse 80
8002 Zürich

2002	Director Pain Control Unit Zurich, Switzerland
2002	Consultant for Pain Medicine Zurich University Hospital
1997 - 2002	Chairman Department of Anesthesiology Ospedale Civico, Lugano
1990 – 1991	Research Fellow and Visiting Professor University California, San Francisco
1980 - 1997	Staff Anesthesiologist University Hospital, Zurich
1972 – 1977	Residency in Anesthesiology Milan and Zurich
1965 – 1972	University and Medical School in Milan, Italy

- Lecturer at the University of Zurich and at the University Hospital
- Organizer of 22 National, European and International Congresses
- Superviser of 8 Doctorate Theses at the University of Zurich School of Medicine
- Medical Consultant of 4 Pharmaceutical Companies
- Invited Speaker in over 100 national und international congresses and meetings
- Author of 10 books und proceedings, 54 original articles, 22 review articles,
- 41 book chapters, and 114 abstracts

1998 - 2004	Editor European Journal of Pain
1992 - 1997	Editor Acta Anaesthesiologica Helvetica
1994 - 2005	Editor International Monitor of Regional Anaesthesia
1998	Editor Der Schmerz
1998	Editor Obstetric Anesthesia Digest
2001 - 2006	Editor Pain Clinic
1994 - 2000	President and Board Member European Society of Obstetric Anaesthesiology
1996	President (2005) and Board Member Swiss Society for the Study of Pain
1996	Swiss Councillor and Treasurer (2008) European Federation of IASP Chapters EFIC
1998 - 2001	President Society of Anesthesiologists of Ticino, Switzerland
2001	Board member World Society of Pain Clinicians

David Niv distinguished lecture

Friday, October 24, 2008
17.00-17.45

Professor David Niv former director of the Center for Pain Medicine at Tel-Aviv Sourasky Medical Centre, was 57 years old when killed 6.2.2007 on his way home near Tel-Aviv, Israel.

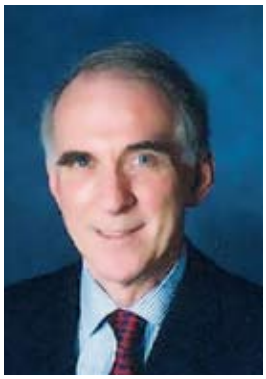
Prof. Niv was a leading expert in the field of pain medicine in Israel and abroad. He published over 120 articles and book chapters on pain treatment and was invited to lecture in congresses and workshops all over the world. His approach was that pain is not only a symptom of illness, but is itself a disease of it's own.

David Niv took upon himself many challenges over the course of his career, including the preservation of clinical excellence and professionalism, instructing the younger generation of doctors on principles of pain management. He was Councillor of IASP (International Association for the Study of Pain), President of EFIC (European Federation of IASP Chapters), President of the Israeli Pain Association, and President of WIP (World Institute of Pain). His contribution to EFIC during his presidency and in the later activities is unforgettable. He was the one who initiated the "European Week Against Pain" in the European Parliament, and the campaign "Do not suffer in Silence" for chronic pain patients.

Personally, David was my close friend. An outstanding friendship extended over more than two decades. Beyond his capabilities, his willingness, his organizational abilities, his wisdom, his practical way of thinking he was near to me.
A great man, a person of integrity, who combined a charismatic personality with an enormous drive to achieve the goals he set. His opinions were always highly valued.

This lecture is dedicated to our good friend David. We will forever remember and respect him.

Prof. Eli Alon
President of the Swiss Association for the Study of Pain



Prof. Dr. Michael Bond
Emeritus Professor of Psychological Medicine
University of Glasgow

Development and Alumni Office 2
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United Kigdom

Professor Bond is a graduate of Sheffield University where he qualified in 1961. He underwent postgraduate training in surgery, neurosurgery and psychiatry and has had careers in both neurosurgery and psychiatry. He became Professor of Psychological Medicine in 1973 and retired from that post in 1998. Professor Bond is a Fellow of The Royal Society of Edinburgh and was awarded a Knighthood by Her Majesty Queen Elizabeth the Second in 1995 for services to medicine.

Professor Bond's research and clinical interests have been in the psychosocial consequences of severe brain injury and he was a member of the world famous team headed by Professor Bryan Jennett which developed the Glasgow Coma Scale and the Glasgow Recovery Scale. He developed a clinical and research interest in pain in the early 1960's and has continued to write on the psychological and social aspects of pain until the present day. Professors Bond and Pilowsky published the first paper on the clinical use of the "Pain Analogue Scale" (VAS) in 1966.

Professor Bond's interests in pain and its management led him to establish the first unit for rehabilitating patients with chronic pain driven by psychological factors in the UK in the early 1980's.

Career Background Relevant to Pain Education and Management
Member of the British Intractable Pain Society from 1967 (this later became the British Pain Society) and President of the British Pain Society 1999-2001.
Hon Member of The British Pain Society.

Member of IASP from 1975 onwards; member of Council 1982-1994 and 1996-2008; President Elect 1999-2002, President 2002-2005, Immediate Past President 2005-2008.

Professor Bond has been a member or chairman at one time or another of twelve IASP committees including chairmanship of the Scientific Programme Committee of the 6th World Congress (1989/90). He has been the EFIC Liaison from 1999-2008 and WHO Liaison 2005-2008.

Professor Bond's most recent and major contribution to the work of IASP has been his Chairmanship of the Developing Countries Taskforce. This was established during his presidency in 2002. The work of this committee and its development of educational and clinical training programmes has had a major impact on the development of pain education, clinical practice and service in developing countries. (See www.iasp-pain.org for Developing Countries Task Force report on Education and Training for Pain Management in Developing Countries).

Professor Bond has published extensively in books, book chapters and papers on the subject of the psychological aspects of pain.

Psychological Aspects of Chronic Pain Management

Friday October 24, 2008
17.00-17.45

The biopsychosocial model of pain and its use as the basis for multimodal pain management programmes is now well known. The psychosocial element includes a range of measurable emotional aspects of mental function including anxiety, depression, fear, catastrophising and others together with those that are cognitively and behaviourally linked, for example self efficacy and perceived control over pain related to a range of behaviours known as coping strategies. Despite or because of the wealth of information about psychological factors, one of the most interesting and consistent findings in the pain management literature is that patients vary substantially in their responses to treatment using the well known technique of Cognitive - Behavioural Therapy. Therefore it is not only important to know the effects of the application of CBT to cognition, emotion and behaviour but also the nature of the cognitive and emotional processes that act as mediators between the treatment and its outcome. Such knowledge is important for the design of CBT programmes for the management of chronic pain. In addition we need to understand other aspects of the management process and in particular the nature of psychological, behavioural and social elements that are important in the progression of acute to chronic pain states. It is now possible to recognise what are known as "risk factors" for the occurrence of this change and they may be identified for convenience in a clinical setting using the Five Flag system devised by Main and others.

The basis of this lecture therefore is to provide some understanding of the role of psychological factors in psychological management, in particular by CBT, in the development of programmes for patients with chronic pain.

PD Dr. Peter Sandor

Neurology
Leiter Kopfweh- und Schmerzzentrum
Universitätsspital Zürich
Rämistrasse 100
8091 Zürich

Peter S. Sándor, MD, studied medicine in Ulm (Germany), Southampton (UK) and Zurich (Switzerland). He specialized in Neurology at the University Hospital Zurich, with research fellowships in the University of Liège, Belgium (Prof. Schoenen) and at the Institute of Neurology, Queen Square, in London (Prof. Goadsby). Currently, he is heading the Headache & Pain Unit at the University Hospital in Zurich. His main research interests are the pathophysiology of migraine, and the pharmacotherapy of headache and pain.

PD Dr. med. Peter S. Sandor studierte Medizin in Ulm (Deutschland), Southampton (UK) und Zürich. Er machte die Facharztweiterbildung in Neurologie an der Universität Zürich, und machte Forschungsaufenthalte an der Universität Liège, Belgien (Prof. Schoenen) und am Institute of Neurology, Queen Square, in London (Prof. Goadsby). Aktuell leitet er die Abteilung Kopfweh & Schmerz an der Neurologischen Universitätsklinik Zürich. Seine Forschungsinteressen sind die Pathophysiologie der Migräne, Medikamentenübergebrauchskopfschmerzen und die Pharmakotherapie von Kopfweh und Schmerz.

Analgetikainduzierte Kopfschmerzen

Saturday, October 25, 2008
9.00-9.30

Medikamentenübergebrauchskopfschmerzen oder analgetikainduzierte Kopfschmerzen, sind mit einer Prävalenz von 1% ein epidemiologisch wichtiges Problem.

Sie treten üblicherweise bei primären Kopfschmerzen auf und sind nach Kriterien der Internationalen Kopfschmerzgesellschaft definiert als chronische, also über mindestens drei Monaten an mehr als 15 Tagen pro Monat auftretende Kopfschmerzen, die in den Kontext einer häufigen Einnahme akuter Schmerzmittel zu stellen sind. Sie treten meist vor dem Hintergrund primärer Kopfschmerzsyndrome, meist einer Migräne auf, können aber auch nach einem Kopftrauma oder einem HWS Schleudertrauma vorhanden sein. Neben möglichen medizinischen Folgen, wie z.B. Analgetikanephropathie, erhöhte Transaminasen oder Gastritis ist besonders problematisch, dass Basistherapeutika, die während eines Analgetikaübergebrauchs verwendet werden, praktisch wirkunsglos sind, und erst nach einem Entzug akuter Schmerzmittel diese Therapierbarkeit wiederhergestellt ist. Somit führt nur ein Weg aus dem Übergebrauchskopfschmerz: der des Entzugs akuter Schmerzmittel und ein massvoller Gebrauch danach. Eine stratifizierte Vorgehensweise ist möglich und empfehlenswert.

Prof. Dr. Paolo Marchettini

Curriculum vitae di Paolo Marchettini nato a Bergamo, 22 giugno 1954

Posizione attuale

Dirigente Responsabile di Unità funzionale denominata - Centro di Medicina del Dolore dell'Istituto Scientifico & Ospedale San Raffaele di Milano, che ha fondato nel 1988, come servizio del reparto di Neurologia
Professore di Fisiopatologia e Terapia del Dolore, Scuola Universitaria Professionale Canton Ticino, Manno (Lugano) Svizzera

Formazione professionale

Laureato in Medicina e Chirurgia con pieni voti e lode nel 1979 all'Università di Milano, specializzato in Neurologia con pieni voti e lode nel 1983 e in Ortopedia con 64/70 nel 1994 presso la stessa Università.
Durante il corso di studi in medicina ha frequentato policlinici universitari in Israele (ospedale Hadassah di Gerusalemme) e in Germania (Università di Friburgo). Dal 1982 al 1986 ha lavorato negli Stati Uniti, prima in qualità di tirocinante (fellow) e poi di assistant professor nel centro di ricerca sul dolore dell'Università di Madison Wisconsin. Nel 1986 si è trasferito in Svezia all'ospedale Karolinska, dove ha continuato le ricerche sulla diagnosi e terapia del dolore lavorando nei reparti di Neurologia e Neurochirurgia. È tornato in Italia nel 1988 assunto su chiamata all'Ospedale San Raffaele, dove ha fondato il centro di medicina del dolore.

Interessi clinici

La ricerca clinica e sperimentale sui meccanismi fisiopatologici del dolore neuropatico e la terapia medica e chirurgica del dolore da cancro e del dolore cronico. (dolore da lesioni nervose iatrogene, terapia con antiepilettici, tecniche di neurostimolazione spinale ed oppioidi intratecali).
In collaborazione con Don Simone dell'Università del Minnesota e José Ochoa del Good Samaritan Hospital di Portland Oregon, ha identificato i recettori del dolore muscolare nell'uomo.
In uno studio eseguito interamente in Italia, in collaborazione con la Prof.ssa Maria Luisa Sotgiu del CNR di Milano, ha studiato gli effetti sul sistema nervoso centrale degli anestetici locali ed il loro potenziale nella terapia del dolore neuropatico. Questo studio è stato riconosciuto tra gli studi importanti a livello mondiale del 1993, da due diverse Associazioni Mediche Americane (di Neurologia e d'Anestesia).
Ha pubblicato 180 lavori e capitoli originali su riviste scientifiche internazionali e diversi altri lavori su riviste italiane. Dal 1986 ad oggi è stato regolarmente invitato più volte l'anno a tenere lezioni magistrali e conferenze sulla fisiopatologia e terapia del dolore in diversi Istituti Clinici ed Università in Italia e nei principali

Associazioni Scientifiche: Istituti Universitari in Austria, Germania, Svizzera, Francia, Belgio, Spagna, Portogallo, Svezia, Danimarca, Finlandia, Grecia, Israele, Arabia Saudita, India, Giappone, Australia, Canada, Stati Uniti, Cile o a congressi internazionali. Come parte della collaborazione tra Istituto Scientifico San Raffaele ed Indian Spinal Injury Center di Nuova Delhi, sostenuta dal Ministero per la cooperazione internazionale e dalla Regione Lombardia, ha fondato la pain clinic per lesionati spinali a Delhi.

Membro del Comitato Editoriale delle riviste scientifiche "Clinical Journal of Pain" (Stati Uniti) e "Pain Reviews" (Londra), "Pain Medicine & Palliative Care" (Londra).
Membro dell'Associazione Internazionale per lo studio del Dolore (IASP) e membro del comitato scientifico della Federazione Europea dei capitoli della IASP.
Socio Fondatore del "Gruppo Neuroscienze e Dolore" della Società Italiana di Neurologia (SIN).
Membro del Comitato Scientifico dell'Istituto UPSA del Dolore
Membro onorario della Società Europea di Neurologia (ENS)

Neuropathic Pain

Saturday, October 25, 2008
9.00-9.30

The current definition of neuropathic pain according to the International association for the study of pain is pain initiated or caused by primary lesion or dysfunction of the nervous system. It has been proposed that the definition should amended withdrawing the term dysfunction that opens the gate for including as neuropathic pain condition any painful disorder produced by the brain, including psychosomatic somatoform disorders. Neurological integralists have recently proposed to confine the definition of neuropathic pain to conditions with “objective evidence of injury of the somatosensory system”. From a pathophysiological perspective defining a landmark (i.e. the evidence of a neurological injury) guarantees clinicians a working instrument to classify patients with precision and fruitfully contribute to pain research. Consequently this allows sound epidemiological quantification of neuropathic pain entities and provides working data to the health payers who decide reimbursement policies. However, debating about the definition is not merely intellectual onanism. Confining the focus on the “objective evidence” of nervous system injury excludes from the diagnosis painful conditions originating from the nervous system in which pain is exclusively a positive neurological phenomenon, not associated with negative findings (weakness or sensory loss). Such is the case of some trigeminal neuralgias, or other dynamic sensory disorders where there is transient nerve hypoxia or entrapment. To exemplify with a few such cases: cauda equina syndrome due to narrow spinal canal or carpal tunnel in the early stages where conduction slowing might not yet be evident. Additionally, confining the anatomical boundary to the ascending somatosensory system eliminates awareness and clinical care for diseases affecting the descending inhibitory system, a research proven existing entity. From the patient perspective a too rigorous definition implies deprivation of a medical diagnosis of neuropathic pain that could be based on symptoms recognition instead. That means for the patient remaining excluded from a very much deserved treatment and also be denied access to reimbursement. Patient and clinical science needs not always and not necessarily match, when in conflict between these needs the pendulum should preferably swing towards the patient's side. When in doubt, adherence of the reported symptom complex to one of the neuropathic pain scales or inventories should be an acceptable diagnostic criterion in the clinic.

Dr. med. Susan Balogh

Institut für Anästhesiologie und Schmerzmedizin
Schmerzklinik Nottwil
Schweizer Paraplegikerzentrum
6207 Nottwil

Medical studies at the University of Illinois, Chicago, Residency in Anesthesiology at Northwestern University, Chicago (USA), then relocation to Switzerland. Diplomate of the American Board of Anesthesiologists and the Swiss Society of Anesthesiology and Resuscitation. From 1975-1996 Attending and Staff Physician for Anesthesiology at the Kantonsspital Luzern, Klinik Sonnenblick, Wettingen, and Wilhelm-Schulthess-Klinik, Zürich. Additional training in acupuncture, hypnosis, und interventional pain therapy. Since 1996 in the Department of Anesthesiology and Pain Medicine, Schmerzklinik Nottwil.

Prof. Dr. Menno E. Sluijter
Consultant, Institute for Anesthesiology and Pain
Swiss Paraplegic Center, Nottwil

Guggistrasse 12A
6005 Luzern

CV see page 16

Tips and Tricks in Radiofrequency

Susan Balogh and Menno E. Sluijter
Saturday, October 25, 2008
9.00-10.30

Introduction
Radiofrequency (RF) has been used in the treatment of chronic pain of various etiologies for over 30 years. It was originally employed as a neuroablative method, as it exposes the tissue to a strong electric field and on continuous application (CRF) produces heat. Various phenomena (gradual recurrence of pain over time, persistence of pain relief longer than sensory loss, lack of histologic evidence) raised suspicions that the clinical effects might be due more to other factors, in particular the electric field, than to temperature. Since the first attempts by Sluijter in 1996 to apply RF while maintaining physiological temperatures by pulsing the current (PRF), the use of this method, which has demonstrated similar efficacy to CRF with less risk of complications and fewer side effects, has become increasingly widespread.

Indications
The diagnostic work-up should be complete; disorders requiring other treatment, e.g., malignancy, infection, or surgical indications, must have been ruled out and more conservative treatment have been unsuccessful. The pain should be constantly localized and persistent, without longer periods of spontaneous resolution. Psychosocial factors should not be in the foreground; in particular, pending litigation is negatively related to outcome. Suspected psychopathology should be evaluated by and discussed with a specialist. Age is no barrier to RF treatment so long as the patient can be positioned properly. Central pain syndromes such as cauda equina syndrome, multiple sclerosis, and areas below a complete spinal cord injury generally do not respond well to RF.

Materials And Methods
The basic equipment is relatively simple: an RF generator, an insulated needle with active tip, a RF probe that inserts into the needle, and a grounding pad. Procedures in the spinal and cranial areas are always performed under fluoroscopic control in three planes, in other areas as needed. The needle depth and angle are adjusted until a threshold below 1V, optimally below 0.5V, is obtained.
For CRF, motor stimulation at 2Hz is then performed; to prevent unwanted motor deficits this threshold should be at least twice the sensory threshold. 0.5-1ml local anesthetic (LA) is injected before current is applied to maintain a temperature of 70-90° for 60-90s.

For PRF motor stimulation is not necessary. Saline is injected as needed to lower the impedance to less than 500Ω. In the spinal area (DRG and medial branch), we apply 45V PRF at 2Hz with pulse width 10ms for 3 min. As this method is generally not painful, LA is only needed if the patient complains of discomfort from the pulsation.

Applications of RF treatment
The most common indication is pain of spinal origin. While CRF is ablative and suitable only where tissue destruction is permissible or desired, such as medial branch and DRG denervation or cordotomy, PRF can be applied to virtually all tissues, at all segmental levels, and in cases of neuropathic pain with an intact neuronal chain. In recent years, positive results have been obtained with intra-articular, intradiscal, and transcutaneous application as well as direct treatment of trigger points, peripheral nerves, and painful scars.

With careful patient selection, RF treatment represents a valuable, minimally invasive option for a wide range of chronic pain disorders.

Prof. Dr. Christoph J. Konrad

Chefarzt Institut für Anästhesie, Chir. Intensivmedizin,
Rettungsmedizin und Schmerzmedizin
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Ärztliche Tätigkeiten

Seit Januar 2007	Chefarzt am Institut für Anästhesie und Reanimation, Kantonsspital Luzern
Mai 1999 - Dez. 2006	Arzt an der Klinik für Anästhesiologie und operat. Intensivmedizin, Universitäts-klinikum, Mannheim
	Notarzt im Rettungsdienstbereich Karlsruhe
Juli 1995 – April 1999	Arzt am Institut für Anästhesie und Reanimation, Kantonsspital Luzern
	Notarzt bei der Air Zermatt, Zermatt

Weitere Qualifikationen

2002	Mitglied in Safety Boards und Advisory Boards zur Durchführung internationaler Phase II Studien im Bereich Anästhesie
1996	Gutachter für verschiedene internationale Fachzeitschriften
1996	diverse Fortbildungen in Krankenhausmanagement, Kommunikation und Debriefing

Mitgliedschaften in verschiedenen Fachgesellschaften

Deutsche Gesellschaft für Anästhesie und Intensivmedizin (DGAI)
International Anesthesia Research Society (IARS)
Deutsche Gesellschaft zum Studium des Schmerzes (DGSS)
International Association For the Study of Pain (IASP)

Habilitation (November 2001)

"Modulation inflammatorischer Prozesse durch Lidocain" (Mannheim)
apl. Professeur seit März 2006

Hochschulausbildung

1988 – 1995	Studium der Humanmedizin an der Ruprecht-Karls-Universität Heidelberg mit Aufenthalten in den USA und der Schweiz

Neue Verabreichungsformen von Opioiden

Saturday, October 25, 2008
9.30-10.00

Christoph J. Konrad und Marcus T. Schley
*Institut für Anästhesie, chir. Intensivmedizin und Schmerzmedizin, Kantonsspital Luzern

Zu den gängigsten und häufigen Applikationsformen von Opioiden in der modernen Schmerzmedizin gehören die enteralen, intravenösen und transdermalen (Otis, 2006) Verabreichungswege.

Zur Beherrschung von insbesondere in der Tumorschmerztherapie häufig anzutreffende sogenannte Durchbruchschmerzen (in der englisch sprachigen Literatur als breakthrough cancer pain bezeichnet) bieten sich intranasale, sublinguale und transmukosale Verabreichungswege an. Diese stellen für den Patienten eine komfortable und lebensqualitätsverbessernde Opition zur Selbstmedikation dar. Kürzlich hat die European Medicines Agency (EMEA) die Zulassung von Effentora® (Cephalon Europe) Fentanyl-Buccaltabletten empfohlen, welche mit 100-800 µg Fentanylcitrat pro Tablette erhältlich sein wird. Dabei erscheint es für die Bioverfügbarkeit unerheblich, ob die Tablette buccal/transmukosal oder sublingual appliziert wird, wie eine Untersuchung an 90 mit Naltrexon vorbehandelten gesunden Probanden zeigen konnte (Darwish, 2008). Beobachtungen zum Verlauf der Plasmakonzentrationen nach einer sublingualen Einzelgabe von 100, 200 bzw. 400µg Fentanyl bei Tumorschmerzpatienten legen den Schluss Nahe, dass sich die Plasmakonzentrationen lediglich in den ersten 100 Minuten nach Gabe erheblich unterscheiden (Lenneräs, 2005). Systematische Langzeituntersuchungen stehen jedoch noch aus. Das Prinzip der intranasalen Applikation als Verabreichungsweg von Analgetika darunter Pethidin/Meperidin (Striebel, 1993), Ketamin (Weksler, 1993), Alfentanil (Schwagmeier, 1995), Sufentanil (Mathieu, 2006) und Fentanyl (Rickard, 2007) wurde bisher in der postoperativen Schmerztherapie, in der Notfallmedizin (Borland, 2007) und zur Prämedikation von Patienten erfolgreich eingesetzt. Zur Anwendung von Opioiden zur Beherrschung von Durchburchschmerzen in der Tumorschmerztherapie sind bisher nur wenige systematische Untersuchungen durchgeführt und veröffentlicht worden. In bisher vorliegenden Studien mit kleinen Fallzahlen bei Tumorschmerzpatienten konnte gezeigt werden, dass die intranasale Applikation von Fentanyl (Striebel, 1993; Zeppetella, 2000; Fitzgibbon, 2003) oder Buprenorphin (Eriksen, 1989) eine schnell einsetzende und deutliche Schmerzreduktion ohne relevante unerwünschten Nebenwirkungen herbeiführen konnte. In den letzten Jahren hat sich die nasale Applikation von Medikamenten, wie zum Beispiel von Sumatriptan beim Migräne-Anfall, sehr bewährt. Die einfache nicht-invasive Applikation, die gute Bioverfügbarkeit, die zuverlässige Resorption über die Nasenschleimhaut, die Abmilderung des First-pass-Effekt zeigen grosse Vorteile. Darüber hinaus bietet die Nasenschleimhaut den einzigen direkten nicht-invasiven Zugang zu den Kompartimenten des zentralen Nervensystems.

In der Behandlung von akuten mittelschweren bis starken postoperativer Schmerzen unter stationären Bedingungen hat Fenanyl-ITS (iontophoretisches transdermales System, IONSYS®, Janssen-Cilag) eindeutige Wirksamkeit gegenüber Placebo gezeigt. Die Daten von Morphin-Vergleichstudien reichen derzeit noch nicht aus um eine ähnlich gute Wirksamkeit zeigen zu können. Zu den häufigsten innovationsspezifischen Nebenwirkungen gehören Hautrötungen und Blasenbildungen an der Applikationsstelle (Hartrick, 2006; Minkowitz, 2007).

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Mathieu, N., et al., Intranasal sufentanil is effective for postoperative analgesia in adults. Can J Anaesth, 2006. 53(1): p. 60-6.
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Otis, J. and M. Rothman, A Phase III study to assess the clinical utility of low-dose fentanyl transdermal system in patients with chronic nonmalignant pain. Curr Med Res Opin, 2006. 22(8): p. 1493-501.
Rickard, C., et al., A randomized controlled trial of intranasal fentanyl vs intravenous morphine for analgesia in the prehospital setting. Am J Emerg Med, 2007. 25(8): p. 911-7.
Striebel, W.H., et al., Intranasal meperidine titration for postoperative pain relief. Anesth Analg, 1993. 76(5): p. 1047-51.
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Zeppetella, G., An Assessment of the Safety, Efficacy, and Acceptability of Intranasal Fentanyl Citrate in the Management of Cancer-Related Breakthrough Pain: A Pilot Study. Vol. 20 No. 4 Oct 2000 J Pain Sympt Manage 253

Prof. Dr. Franco Marinangeli

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1967	Born in L'Aquila (Italy) 23.06.1967
from 2007	Responsible of the Acute and Chronic Pain Treatment Service of L'Aquila Hospital
	¨ Author of about 250 publications on Anaesthesia, Pain Management and Emergency Medicine
	¨ Attended more than 150 national and international Congresses, invited speaker in 73 Congresses
1991	Degree in Medicine: Nov/1991, cum laude – University of L'Aquila, Italy
1996	Postgraduate in Anaesthesiology: Nov/1996, cum laude – University of L'Aquila, Italy
	Professor of the School of Specialization in Anesthesiology and Pain Treatment of L'Aquila University
2001	Postgraduate in Pain Treatment: Oct/2001 – University of Verona, Italy
1994-1998	Anesthetist - S. Salvatore Hospital - L' Aquila, Italy
1998-2005	Researcher - Faculty of Medicine, University of L'Aquila, Italy
2006	Professor - Faculty of Medicine, University of L'Aquila, Italy
	¨ Author and Co-Author of many papers published on national and international scientific journals
	¨ Member of AARAM (Associazione Anestesisti Rianimatori Abruzzesi Molisani); AISD (Associazione Italiana per lo Studio del Dolore) and SIAARTI (Associazione Italiana di Anestesia , Analgesia, Rianimazione e Terapia Intensiva)
Fields of interest	¨ Anesthesiology
	¨ Acute and Chronic Pain Management
	¨ Emergency Medicine

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Italy

Personal

1948	Born in L'Aquila (Italy), 30.01.

Professional

1973	Graduated in Roma, "La Sapienza" University, Medical School
1976	Completed residency in Anaesthesia and Intensive Care in July 1976 in the same University
1976 - 1985	Assistant Professor, and Responsible of Pain Centre, at the Department of Anaesthesiology, L'Aquila University, Medical School, Nov 1976-Oct 1985
1985	Professor and Chairman of the same Department since Nov 1985

Scientific

1973	Fellowship CNR-NIH at the Albert Einstein College of Medicine, Yeshiva University, New York (NY), July-Dec 1973
1975	Fellowship at the Hamburg University (Hamburg, Germany), Aug-Sept 1975
1985 - 1987	Invited Professor at the Massachussets University (Worchester, MA), Department of Anaesthesiology and Pain Centre, Sept-Oct 1985, 1986, 1987
1989 - 1991	Invited Professor at the University of Tel-Aviv (Israel), Department of Anaesthesiology and Pain Centre, Aug-Oct 1989, 1990, 1991
1995	Invited Professor at the University of Barcelona (Spain), Department of Anaesthesiology, October 1995
since 1974	Member of the Società Italiana di Anestesia, Analgesia, Rianimazione e Terapia Intensiva (SIAARTI)
since 1977	Member of the Associazione Italiana per lo Studio del Dolore (AISD)
since 1988	Member of the Board of AISD
since 1984	Member of the International Association for the Study of Pain (IASP)
1987-1992	Member of the IASP Task Force on Acute Pain,
1993	Founding Member of the European Federation of IASP Chapters (EFIC),
1993-1999	Secretary of EFIC
1994	Founder of the European Society of Obstetric Anaesthesia (ESOA)
1994-1998	Secretary of ESOA
1998-2001	Treasurer of ESOA
1999-2002	Treasurer of EFIC
2001	President of ESOA
2003	President of the Italian IASP Chapter (Associazione Italiana per lo Studio del Dolore – AISD) Member of the Board of the World Institute of Pain (WIP)
2008	President of EFIC

- Invited speaker in more than 400 congresses (national and international), mainly on Obstetric Anaesthesia and on Pain Management
- Author of about 400 papers, published on international and national scientific journals, mainly on Obstetric Anaesthesia, and Pain Management
- Author of 43 chapters of books on Obstetric Anaesthesia, and Pain Management
- Editor of 28 books, and congress proceedings, including one textbook on Obstetric Anaesthesia
- Organiser of more than 40 congresses (including the 1st ESOA Congress, Florence, 1994; 1st EFIC Congress, Verona, 1995; and the 10th Congress of the World Society of Pain Clinicians, Sardinia, 2002), mainly on Obstetric Anaesthesia, and Pain Management

Economic aspects of chronic Pain

F. Marinangeli[1], E. Alon[2], E. Petrucci[1], C. Bonetti[1], S De Santis[1], G. Varrassi[1]

Saturday, October 25, 2008

9.30-10.00

[1]University of L'Aquila, Department of Anesthesia and Pain Therapy, 67100 L'Aquila, Italy
[2]University of Zurich School of Medicine, Department of Anesthesiology
University Hospital, 100 Raemistrasse, 8091 Zurich, Switzerland

Introduction

Recently, the clinical problem of pain has received much more attention with a major focus on cancer and acute post-operative pain. Health policy issues related to pain, including areas of costs, access to care, regulatory perspectives, and ethical and legal issues, have likewise been neglected[1].

Cost issues have been minimally explored in the area of pain management for two major factors. The first is that pain relief has been considered in subjective terms as the relief of suffering. The second reason for the lack of attention about cost issues in pain relief is that, in the last period, pain management was limited to oral medications or intramuscular injections, and both of these are relatively inexpensive. The development of parenteral infusion devices, surgical techniques, and anesthetic approaches to pain has led to multiple treatment options, the availability of which has resulted in far greater expense, both indirect cost and indirect expenses[2,3].

Independently by the treatment, it must be considered that postoperative pain treatment improves per se patient outcome and it is cost effective for health organization. A bad postoperative pain treatment means a delayed discharge, with large adjunctive costs that have to be considered in a correct economic evaluation.

If the costs may be minimal in a surgical patient, who requires only postoperative treatment (l-3 days), the same technology applied to a patient with chronic cancer pain results as more expensive (long duration treatment). For application of the pharmacoeconomic in pain, it is important to establish standards of care and appropriate indications to use different technological approaches. For this reason, it is necessary to discuss both the utility of the approach and the potential problems due to in the use of technology. Many medical treatments, including surgical techniques, diagnostic treatments, and use of new medical technology, have been assessed in an attempt to evaluate the cost-benefit ratio of technology.

Cost associated with pain treatment

Nowadays, the costs associated with health care are mainly the results of the cost of technology. Jennett defined the guidelines for an appropriate use of technology for health care. These can be also applied in the pain management (Tab.1)[4]. Cost-effectiveness, cost-utility and cost-minimisation studies are essential for a complete economic evaluation. Cost-effectiveness analysis measures the benefits or outcomes in biological terms. Even if a drug is associated with additional costs, it may be a preferred regimen if it results in improved clinical outcome. This is the case of two analgesics that produce different discharge times. Cost-utility analysis examines outcome of therapeutic regimens when treatments are concerned with improving the quality of life. This is the case of two analgesics or techniques that determine a different quality of postoperative period, also if both assure the same discharge time. Cost-minimisation analysis is used when the outcome of two or several treatments are identical and therefore only costs must be considered.

The appropriate approach for a pharmacoeconomic study on pain is to divide this letter in three fields: cancer pain, chronic non malignant pain, acute pain. In the cancer pain the calculation of costs is particularly difficult because we do not have evaluation parameters to make a cost-benefits analysis. Instead the cost-benefits ratio in pain management has been used with success in chronic non-malignant pain, such as in the case of rehabilitation for the patients with low back pain. In the case of rehabilitation, measures such as return to work, lost earnings, or potential rehabilitation are often used.

In postoperative pain, a few outcomes are related to pain treatment and hence to the incidence of postoperative complications. For example, opioid administration can be correlate to respiratory depression, that needs a most accurate monitoring and can cause delayed discharge. The same opioids can be cause of nausea and vomiting that necessitates of antiemetics with an adjunctive costs.

Tab. I: Classification of inappropriate use of technology	
Unnecessary	Because the desired objective can be achieved by similar means. For example, the routine use of certain monitoring techniques for coronary care or in obstetrics or the use of computerised tomography head scanning for all patients with headaches or dementia.
Unsuccessful	Because the patient has a condition too advances to respond to treatment. This can apply to instituting or continuing resuscitation or intensive care, or to more extended treatment of metastatic cancer.
Unsafe	Because the complication outweigh the probable benefit. This can apply to invasive investigations as well as to dangerous therapy.
Unkind	Because the quality of life after rescue is not good enough or its duration-not long enough to have justified the intervention.
Unwise	Because it diverse resources from activities that would yield greater benefits to other unknown patients.

In general, all the potential side effects of a therapy must be considered in a cost-benefits evaluation. A drug apparently cheap can become much more expensive in consideration of its potential side effects. Beyond the drug cost we should consider personnel costs.

It is necessary to evaluate the routes of analgesic administration to explore the costs associated with pain. In fact, "high-tech" pain treatments (invasive procedures, parenteral or intraspinal opioid administration, infusion devices) have an high incidence on costs.

McQuay[4] emphasises the need for well controlled studies to evaluate routes of administration for risk and benefit. An appropriate assessment of pain entity correlate to different surgeries is fundamental for appropriate choice of route of administration. In this moment, there are not studies defining the entity of pain for each surgery. We believe that this is the first step for a standardised approach and control quality in pain therapy.

In table II are summarised all direct and indirect costs for pain management.

Tab. II	
Direct costs	
1	Drugs costs
2	Cost associated with method of administration
3	Personnel costs
4	Cost of surgical and anesthetic procedures
5	Costs of radiation therapy
Indirect costs	
1	Cost of unrelieved pain at home
2	Cost of non drug intervention
3	Cost savings by barious care settings
4	Cost associated with morbidity
5	Cost to justify services
6	Conflict of interest
7	Cost to patient and families

Conclusions

In the pain management, especially in cancer pain treatment, it is very difficult to use the pharmacoeconomics rules. Instead it is our ethic duty to consider these laws in the treatment of acute and non-malignant pain that often is treated with inadequate methods. It should be remembered that in the pain treatment, such us in other areas, more expensive does not mean more efficacious.

When it is possible, the economic analysis, with cost-utility, cost-efficacy and cost minimisation studies, must became the basic tool for a correct pain treatment and for the definition of standard criteria.
As recently expressed in a recent review[5], the next logical step in the advancement of health care appears to be the melding of the well established principles of evidence-based medicine with both patient-centered outcomes and Cost Utility Analysis data so as to create value-based medicine[6].

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5. Vetter TR. The Application of Economic Evaluation Methods in the Chronic Pain Medicine Literature. Anesth Analg 2007;105:114 –8.
6. Brown GC, Brown MM, Sharma S. Evidence-based to valuebased medicine. Chicago: AMA Press, 2005.

Prof. Dr. Hans Georg Kress

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Hans Georg Kress is Full Professor of Anaesthesiology, Intensive Care and Pain Medicine at the Medical University of Vienna, where he is Head of the Department of Anaesthesia and Pain Therapy since 1993.

Professor Kress earned his MD and PhD degrees and completed his residency in Germany. He is certified by the Austrian and the German Board of Physicians, with added qualifications in Critical Care Medicine, Emergency Medicine and Prehospital Care.

He is President Elect of the European Federation of IASP Chapters (EFIC). He was founding chairman of the Task Force on Pain Management for the Austrian Society of Anaesthesiology, Resuscitation and Intensive Care Medicine, and past president of the Austrian Pain Society. He is a co-founder and executive board member of the Austrian Society for Palliative Care.

Professor Kress is Associate Editor of the European Journal of Pain (EJP) and co-editor of Acute Pain. His multiple clinical and experimental research interests include invasive pain therapy and neuromodulation in cancer and non-cancer patients, neuro- and immunopharmacology of anaesthetics, analgesics and cannabinoids.

Cannabinoids in acute and chronic pain management: what is certain?

Saturday, October 25, 2008
10.00-10.30

Interest in cannabis and its active constituents, cannabinoids, as therapeutic agents for pain and symptom management has increased recently. Plant-derived as well as synthetic dronabinol (Δ^9-tetrahydrocannabinol, THC, one of the main ingredients in cannabis) and the synthetic THC analogue nabilone are available by prescription in many countries.
The detection of two specific cannabinoid receptors (CB1 and CB2) and their endogenous ligands prepared the ground for numerous experimental studies on the antinociceptive effects. CB1 receptors are widely spread in pain-processing brain regions and spinal cord, but also on peripheral nerve terminals. Animal studies were performed with different cannabinoids, all confirming their analgesic, anti-hyperalgesic and anti-inflammatory properties. In humans, however, only very few data exist from controlled trials investigating the analgesic efficacy of cannabinoids.

To date, the potential role of exogenous cannabinoids, such as nabilone or plant-derived Δ9-tetrahydrocannabinol (THC, dronabinol), in acute and chronic pain management is controversially discussed and has still to be defined based on clinical evidence. In this overview, recent experimental and clinical data on the anti-nociceptive actions of cannabinoids are presented. In human acute pain models, oral THC (dronabinol) and cannabis extract often failed to produce significant analgesic and anti-hyperalgesic effects. In contrast, controlled clinical crossover trials clearly demonstrated that orally administered dronabinol (THC) is able to significantly reduce central pain in multiple sclerosis (MS) patients. A plausible explanation of this discrepancy could be that cannabinoids are more effective in chronic pain conditions than in experimental human pain models, presumably due to differences in their respective pathophysiology and the underlying pain mechanisms.

Dr. Franco de Conno

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Date of Birth: 15.4.1948
Nationality: Italian

Career

1974-1975	Fellowship at the Division of Anaesthesiology - Hospital Policlinico of Milan
1975-1980	Assistant at "Luigi Sacco" Hospital - Dept. of Anaesthesiology
1978-1980	Fellowship of the Dept. of Pain Therapy, National Cancer Istitute of Milan
1980-1988	Assistant of the Division of Pain Therapy and Palliative Care, at the National Cancer Institute, Milan
1988-1994	Vice Director of the Division of Pain Therapy and Palliative Care at the National Cancer Institute, Milan
1994-2007	Director of the Division of Rehabilitation, Pain Therapy and Palliative Care at the National Cancer Institute of Milan

Current positions

Director of the Division of Rehabilitation, Pain Therapy and Palliative Care at the National Cancer Institute of Milan (INT)
Vice Director of the WHO Collaborating Centre for Cancer Pain Relief - Milan
Honorary Chairman of the Research Network of the European Association for Palliative Care (EAPC)
Honorary Director of the EAPC
Director of School of continuous education in palliative medicine (SFAMP) at INT Milan
President of the Lymphology School at INT Milan
Fellow of the Royal College of Physicians, UK
Member of the Scientific Committee of the Floriani Foundation, Milano

Research appointments

From 1983 to 2001 Chair, co-ordinator of 13 national research projects and bodies such as Italian National Council for Research (C.N.R), IRCCS projects for the Minister of Health, Italian Association for Researching Cancer AIRC, Sub committee on pain therapy of the C.U.F (Health Ministry Commission on Drugs)

Editorial commitments

From 1985 to 2007 member of 15 editorial or scientific reviewer boards of national and international journals

Appointments of professional societies

From 1985 member of 10 professional societies in pain relief and palliative care

Teaching activities	From 1985 to 2007 Professor or Lecturer in pain therapy and palliative care at 10 different schools or Universities and since 1999 Director of the School of continuous education in Palliative Medicine (SFAMP) at the National Cancer Institute of Milan
Lectures at congresses and courses	Invited speaker for 750 lectures at international and national congresses and courses
Congress appointments	From 1983 to 2007 Secretary or Member of the Scientific and/or Organising Committees of 60 Congresses on national and international level
Scientific publications	Author and Co-author of 13 books and 390 papers published in national and international journals

Il secondo scalino del WHO e la titolazione degli oppioidi

Saturday, October 25, 2008
10.00-10.30

Cancer pain treatment is still a controversial matter and quick pain control achievement is one of the main goals of an effective pain management. Aim of the present study is to estimate the percentage of initial treatment phase period with controlled pain in patients treated with immediate release oral morphine (IRM). Methods According to EAPC recommendations patients with moderate to severe cancer pain and never treated with strong opioids were administered IRM 5mg/4 h or 10 mg/4h in the titration phase (first 5 days). Pain intensity was evaluated five times a day through a diary self compiled by the patients and for each patient the percentage of time with controlled pain during the titration phase was then calculated as main outcome measure. Results 159 consecutive cancer patients were enrolled in the study. Their most frequent cancer site was lung (22% of pts), most had metastasis (85%) and a KPS >60 (85%). 75% of pts were under step II WHO analgesic ladder, while 23% under step I. Nociceptive pain was present in 81% of pts, neuropatic pain in 31%, mixed pain in 43% and breakthrough pain in 54% of pts. IRM was administered at the two different dosages of 5 and 10 mg/4 hours in respectively 29% and 71% of patients. The mean percentage of time with controlled pain during the titration phase was 74% (95% CI: 0.69-0.78). 50% and 75% of pts reached their first pain control respectively within the first 8 and 24 hours. The pain score was 7.63 at baseline, and 2.43 and 1.67 respectively after 3 and 5 days of treatment, and both data indicate statistically significant differences ($p<0.001$).
Conclusions: The results obtained confirm the EAPC recommendations that IRM is still today a very good choice to reach a quick and satisfactory pain control in the titration phase in patients with moderate to severe cancer pain

Dr. Monika Jaquenod-Linder

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1988	University of Zurich state examination
1995	FMH in Anaesthesiology
1995 – 1996	Clinical and research fellow Pain Management, University of Sydney; Prof Cousins
Since 1997	consultant, anaesthesia and pain management, University Hospital of Zurich

Steroids in Interventional Pain Management

Saturday, October 25, 2008
11.00-11.30

Interventional pain therapy with injection of steroids in the spinal area is well established. However, some of the complications are very serious! There will be a presentation of recent literature on the topic.
We discuss the steroids to use in the future minimizing the risk of the fatal complication as e.g. spinal infarction!

Dr. Michael Hartmann
Leitender Arzt Abteilung für Schmerzmedizin

Bethesda Spital
Gellertstrasse 144
4020 Basel

Michael Hartmann, MD is working 100% in pain. After working as an anaesthesiologist for 18 years with university training in Hannover and Freiburg, Germany, he specialized in intensive care medicine, emergency medicine and pain medicine. His research activities included ventilator associated pneumonia, immunology and alpha2-agonists. Since then he was responsible for the interventional pain management of patients with chronic non-malignant pain in two clinics in Basel, Switzerland. He is Fellow of Interventional Pain Practice of the World Institute of Pain, Board Member of the Swiss Society for Interventional Pain Management and Councillor of the Swiss Society for the Study of Pain.

Algorithms for Interventional Pain Therapy.

Saturday, October 25, 2008
12.00-12.30

The lecture will focus on the necessity to define algorithms for working with chronic pain patients when utilizing interventional techniques. This on the one hand helps to make one`s own proceeding become predictable for team members of other disciplines and on the other hand it can support quality management issues.
Personal experience, peer review papers, evidence-based medicine and cost-effectiveness assessments will influence one`s practice and may lead to published guidelines like those by the American Society of Interventional Pain Physicians. The latter and the author`s personal application will be discussed.

Dr. Pietro M. Schianchi

FMH Neurochirurgie, FIPP
Arztpraxis
Via A. Fogazzaro 3
6900 Lugano

1947	Born at the 15th of June 1947 in LUGANO-SORENGO
1974	Graduation in medicine: University of Berne
1978	Doctor medicinae, University of Berne with a thesis in immunopathology
1987	Training in neurosurgery at the University hospitals of Berne, Zurich, Oxford and Glasgow with swiss specialty title in neurosurgery (FMH) Training in neuropathology at the University of Oxford (GB) and research with publications on Cerebral vasospasm after subarachnoid hemorrhage in humans.
1989	Private practice in spinal microneurosurgery in Lugano since 1989. Operative activity in the clinics of the ARS MEDICA GROUP in Sorengo-Gravesano near Lugano
Since 2005	Activity in miniinvasive spinal pain treatment with pulsed radiofrequency in Lugano
2007	Fellow Interventional Pain Practice (FIPP) after international examination, Budapest 2007

Member of

- Swiss Medical Society
- Swiss Society of Neurosurgery and Neurology
- Union of Vascular Societies of Switzerland
- World Institute of Pain
- Swiss Association for the Study of Pain
- Intense activity with publications and presentations on pulsed radiofrequency at international congresses since 2006
- Knight of the Order of the Holy Sepulchre since 1986
- Member of the international P.E.N. society

Results of pulsed radiofrequency for chronic radicular pain

Saturday, October 25, 2008
11.00-11.30

Introduction

Chronic radicular pain (CRP) is a complex condition that is difficult to diagnose and treat. It affects mostly patients above the age of 55, but young people are not spared, especially those with failed back surgery syndrome .
The etiology is multifactorial: mechanical, biochemical and inflammatory.
The precise pathophysiology is as yet undetermined, but the dorsal root ganglion (DRG) may play a key role in the integration and transmission of the humoral and neural signals.
A careful history and a precise clinical examination are crucial, more so than the radiological findings; not infrequently selective diagnostic blocks (DB) are necessary to determine the proper level.
Conservative therapies are very often unsuccessful, and medications can produce side effects.
Epidural - and transforaminal - steroid infiltrations generally produce short-lasting pain relief. Discectomies, decompressions, and instrumented operations (25% of all spine operations) fail in about 30% of cases. In this difficult situation, it is important to utilize therapies with an optimal risk/benefit ratio and costs as low as possible.
Pulsed radiofrequency (PRF) applied to the DRG of the involved spinal nerves is a minimally invasive outpatient procedure in which the resulting electric field has provided long-lasting pain relief in large numbers of patients.
This presentation reports on the treatment of a group of 57 consecutive patients with CRP in the lumbosacral area.

Patients and methods

We applied PRF with a Radionics 3C – plus generator (500 kHz) using a SMK – C10 cannula (22 G) with an active tip of 5 mm introduced percutaneously under fluoroscopic guidance in 3 projections. After stimulation of the nerve with 50 Hz (mean 0.34 V) and noting the impedance (mean 360 Ω), PRF was applied for 120 s with a pulse width of 20 ms and a frequency of 2 Hz . The temperature was not permitted to rise above 41°C.
A total of 57 consecutive patients (31 f, 26 m) with lumbosacral CRP (duration ≥ 6 months) were treated with 1 session each; in 16 cases two levels were treated; and 5 patients had a second procedure.
Pain relief of 50% or more was obtained in 41 cases (71%). Follow-up examinations showed a long-lasting effect (mean 17.7 months).
No complications or pain increase were observed during or after PRF treatment.

Conclusions

The conservative treatment of CRP is very often ineffective, and major surgery does not offer an adequate guarantee of success. The trend toward minimally invasive approaches to this type of pain has gained popularity in recent years, especially the use of steroid infiltrations, which even when positive generally do not offer a long-lasting effect and can cause complications.
Our results with PRF applied to the DRG have shown positive effects lasting for many months in 71% of our patients.
We therefore suggest the use of this therapy before performing steroid infiltrations or making the decision to operate.

Dr. Danielle Skouvaklis

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Dr Danielle Skouvaklis
FMH en anesthésie,
Fellow of the Faculty of Pain Medicine of Australia and New Zealand College of Anesthesiology, FFPMANZCA
Anesthésiste à la Clinique Cécil, Lausanne
Responsable du Centre de la Douleur Cécil

Le programme ADAPT: Une valeur ajoutée aux thérapies invasives?

Saturday, October 25, 2008
11.00-11.30

Le programme ADAPT, une valeur ajoutée aux techniques invasives ?
La neuromodulation, chimique par pompe intrathécale ou électrique par neurostimulation, sont des techniques invasives reconnues pour le traitement de la douleur chronique. Des programmes de management de la douleur basés sur la thérapie comportementale et cognitive sont également reconnus dans traitement de la douleur persistante.
L'importance des facteurs psychologiques sur le résultat des techniques invasives a été clairement établie. Des recommandations ont été édictées pour que ces facteurs soient évalués chez tous les patients devant bénéficier d'une thérapie invasive.
Dès lors, une combinaison de ces 2 approches semble être séduisante. Cependant cette approche expose le patient à des modèles thérapeutiques différents et possiblement conflictuels.
ADAPT est un programme intensif de management de la douleur basé sur une approche cognitive et comportementale. Il s'agit d'une thérapie de groupe (8 à 10 patients) mené par une équipe multidisciplinaire pendant 3 semaines de manière ambulatoire.
Une étude associant la combinaison d'un programme intensif cognitif et comportemental à la neuromodulation, chimique ou électrique, montre que l'association d'une approche somatique et psychosociale apporte de meilleurs résultats que ces thérapies appliquées individuellement.

Prof. Dr. Hans Georg Kress

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Hans Georg Kress is Full Professor of Anaesthesiology, Intensive Care and Pain Medicine at the Medical University of Vienna, where he is Head of the Department of Anaesthesia and Pain Therapy since 1993.

Professor Kress earned his MD and PhD degrees and completed his residency in Germany. He is certified by the Austrian and the German Board of Physicians, with added qualifications in Critical Care Medicine, Emergency Medicine and Prehospital Care.

He is President Elect of the European Federation of IASP Chapters (EFIC). He was founding chairman of the Task Force on Pain Management for the Austrian Society of Anaesthesiology, Resuscitation and Intensive Care Medicine, and past president of the Austrian Pain Society. He is a co-founder and executive board member of the Austrian Society for Palliative Care.

Professor Kress is Associate Editor of the European Journal of Pain (EJP) and co-editor of Acute Pain. His multiple clinical and experimental research interests include invasive pain therapy and neuromodulation in cancer and non-cancer patients, neuro- and immunopharmacology of anaesthetics, analgesics and cannabinoids.

Ziconotide (Prialt): A promising alternative to intrathecal opioids

Saturday, October 25, 2008
11.30-12.00

Since the early 1980s, intrathecal drug infusion systems have been used as a last resort in severe chronic pain inadequately controlled by appropriate systemic analgesic treatment. With the technological improvements of catheters and implantable devices, not only refractory cancer pain (2 – 5% of cancer pain), but also resistent noncancer pain syndromes have become promising indications for continuous intrathecal analgesia. In patients with neuropathic or mixed nociceptive-neuropathic pain, the delivery of analgesics into the cerebrospinal fluid, where they act directly on the CNS, has been shown to provide improved quality of life, better pain relief, at lower doses and with fewer adverse effects. Morphine and hydromorphone are the most often used intrathecal analgesics, sometimes combined with the non-opioid co-analgesics clonidine or bupivacaine. However, the development of opioid-induced tolerance or hyperalgesia, severe adverse effects including suppression of the hypothalamic-pituitary axis and potential respiratory depression limit the intrathecal use of opioids, especially in many noncancer patients. In 2005, ziconotide (Prialt®), a novel non-opioid intrathecal analgesic was licensed for use in Europe for severe chronic cancer and noncancer pain. Ziconotide is a reversible N-type voltage-sensitive calcium channel blocker specifically developed for intrathecal use with pain as the primary indication. Efficacy and safety have been demonstrated by randomized, controlled trials in both cancer and non-cancer pain. The unique pharmacological properties of this biological drug lacking development of tolerance, physical dependence or respiratory depression may help to redefine the indications, the polyanalgesic concept and the actual place for intrathecal analgesia. In this presentation, typical patients that may benefit from intrathecal analgesia will be described. Finally, the revised recommendations of the most recent Polyanalgesic Consensus Conference 2007 will be presented.

Prof. Dr. Paolo Marchettini

CV see page 40

La Neurostimolatore Spinale

Saturday, October 25, 2008
11.30-12.00

Nella pratica clinica si può definire cronico un dolore che persiste per oltre 3 mesi, anche se in campo oncologico questo tempo viene considerato come troppo lungo. Restringendo il campo ai pazienti con dolore cronico benigno, si può affermare che molto spesso hanno dolore neuropatico cioè un dolore conseguente a lesione del sistema nervoso centrale o periferico. Spesso questi pazienti sono casi clinici complessi, di difficile definizione fisiopatologica e di altrettanto difficoltosa gestione terapeutica. Al termine di un iter diagnostico articolato che prevede l'impiego di una fine semeiotica clinica, spesso supportata da indagini psicologiche, neurofisiologiche e radiologiche, si conclude per un dolore neuropatico o misto cioè conseguente ad un danno nervoso in associazione ad una stimolazione nocicettoriale. A questo punto il percorso terapeutico medico può essere costellato da numerosi e diversi trattamenti farmacologici, ritenuti idonei nel trattamento della specifica condizione evidenziata, che tuttavia non sortiscono un effetto sufficiente nel controllo del dolore. Solo a questo punto, nei casi selezionati, può essere proposta la neurostimolazione midollare. Questa tecnica è stata sviluppata nell'uomo a partire dalla fine degli anni sessanta con le prime osservazioni di Shealy che prendevano spunto dalla "teoria del cancello" di Melzack e Wall. Nel corso degli ultimi 30 anni la ricerca nel campo algologico ha permesso di differenziare il dolore nocicettivo da quello neuropatico (Hansson et al 2001), affinando la tassonomia del dolore e chiarendo per esempio che i pazienti che rispondevano particolarmente bene alla neurostimolazione midollare erano quelli affetti da dolore conseguente a lesioni nervose. Dagli inizi degli anni 70 la neurostimolazione midollare prendeva piede anche in Europa e con lo svilupparsi delle tecniche chirurgiche e della microtecnologia si è giunti negli ultimi decenni, all'impianto di elettrodi percutanei e alla possibilità di testare l'efficacia della stimolazione prima dell'impianto definitivo. Questo sviluppo ha permesso un ampliamento e una migliore specificazione delle indicazioni, riducendo l'invasività della metodica, arricchendo in modo significativo l'armamentario terapeutico del terapista del dolore.

La neurostimolazione spinale fa parte delle tecniche invasive utilizzabili nei pazienti con dolore cronico non responsivo o responsivo in modo insufficiente a trattamenti farmacologici o altri trattamenti considerati meno invasivi.
La neurostimolazione midollare si attua posizionando, sotto guida fluoroscopica, un elettrodo multipolare per via percutanea nello spazio epidurale durante una sessione chirurgica in anestesia locale. Durante la seduta operatoria, stimolando mediante un generatore di impulsi esterno e in stretta collaborazione con il paziente, si ottiene un posizionamento epidurale, perlopiù mediano o paramediano posteriore, che evochi parestesie che coprano il territorio di dolore riferito dal paziente. In seguito si tunnellizza al fianco del paziente l'estensione dell'elettrodo e così si può iniziare il periodo di prova. Nelle 2-4 settimane successive il paziente potrà provare la neurostimolazione midollare per verificarne l'efficacia sul proprio dolore nella vita quotidiana. Il paziente, al termine del periodo di prova, con l'aiuto del medico di riferimento, può decidere se impiantare, in una tasca addominale un generatore di impulsi programmabile dall'esterno o rimuovere

l'elettrodo nel caso di inefficacia della metodica. Nel caso dell'impianto della batteria questo avverrà durante una seduta operatoria in anestesia locale. La durata nel tempo della batteria (solitamente 3 - 7 anni) dipenderà dai parametri di stimolazione utilizzati e più in generale da quanto lo stimolatore sarà tenuto in funzione.

La neurostimolazione midollare è indicata nei casi di dolore neuropatico secondario a lesione dei nervi periferici, delle radici nervose o di dolore misto, come da FBSS, non sufficientemente responsivo a trattamenti farmacologici o ad altri trattamenti considerati meno invasivi. Il consenso attuale in campo di neurostimolazione a scopo antalgico si fonda su numerosi studi clinici e purtroppo pochi lavori randomizzati e controllati.
L' H San Raffaele promuove una gestione uniforme del dolore, attraverso una sua corretta e puntuale identificazione e valutazione e suo trattamento.
In un recente lavoro, la neurostimolazione midollare è risultata efficace in oltre l'80% di 28 pazienti studiati con nevralgia post-erpetica per un periodo medio di follow up di 29 mesi.
La neurostimolazione midollare può essere un'alternativa interessante nel caso di risposta insufficiente ai trattamenti medici nei pazienti affetti da dolore cronico post amputazione in quanto sembra efficace nel 50% circa dei casi, in particolare nel dolore da moncone.
In un recente studio prospettico randomizzato e controllato, condotto su 50 pazienti con FBSS, la neurostimolazione spinale è risultata più efficace rispetto al reintervento chirurgico nel trattamento del dolore radicolare persistente dopo chirurgia spinale lombare.
In un recente studio randomizzato effettuato su 54 Pazienti con CRPS non responsiva ai trattamenti convenzionali, il 67% dei pazienti trattati con SCS ha riportato una significativa riduzione dell'intensità del dolore e un miglioramento della qualità di vita rispetto ai controlli.
Da una recentissima revisione sistematica della letteratura riguardante la neurostimolazione spinale nelle CRPS di tipo I e tipo II risulta che entrambe le condizioni sono supportate da evidenza con livello di tipo A per la CRPS di tipo I e livello di tipo D per la CRPS di tipo II. Sempre dallo stesso lavoro emergono evidenze a favore di costi-benefici nei soli casi di CRPS di tipo I.

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2002	Director Pain Control Unit Zurich, Switzerland
2002	Consultant for Pain Medicine Zurich University Hospital
1997 - 2002	Chairman Department of Anesthesiology Ospedale Civico, Lugano
1990 – 1991	Research Fellow and Visiting Professor University California, San Francisco
1980 - 1997	Staff Anesthesiologist University Hospital, Zurich
1972 – 1977	Residency in Anesthesiology Milan and Zurich
1965 – 1972	University and Medical School in Milan, Italy

- Lecturer at the University of Zurich and at the University Hospital
- Organizer of 22 National, European and International Congresses
- Superviser of 8 Doctorate Theses at the University of Zurich School of Medicine
- Medical Consultant of 4 Pharmaceutical Companies
- Invited Speaker in over 100 national und international congresses and meetings
- Author of 10 books und proceedings, 54 original articles, 22 review articles,
- 41 book chapters, and 114 abstracts

1998 - 2004	Editor European Journal of Pain
1992 - 1997	Editor Acta Anaesthesiologica Helvetica
1994 - 2005	Editor International Monitor of Regional Anaesthesia
1998	Editor Der Schmerz
1998	Editor Obstetric Anesthesia Digest
2001 - 2006	Editor Pain Clinic
1994 - 2000	President and Board Member European Society of Obstetric Anaesthesiology
1996	President (2005) and Board Member Swiss Society for the Study of Pain
1996	Swiss Councillor and Treasurer (2008) European Federation of IASP Chapters EFIC
1998 - 2001	President Society of Anesthesiologists of Ticino, Switzerland
2001	Board member World Society of Pain Clinicians

Low back pain and headache during pregnancy

Saturday, October 25, 2008
12.00-12.30

Back Pain in the Lumbar Region

One of the most frequent pain conditions which occur during pregnancy is low back pain, which sometimes is caused by the pregnancy itself. In a retrospective investigation 66% of women in their post menopausa period reported pain in the lumbar vertebral region. Ten percent of the women stated that pain developed for the first time during the pregnancy. Women with a positive back pain history have a 40% increased risk for postpartal back pain. In the opposite case, women with

back pain, which ocurred for the first time during the pregnancy have a higher incidence of postpartal back problems. No connection could be proven between obstetrical epidural analgesia and postpartal back pain.

Migraine and Tension Headache

Different kinds of headache arise frequently during the pregnancy. Most frequent is migraine but also tension headache. Other, fortunately rare causes of headache are subarachnoidal or intracerebral bleeding, thrombosis of cerebral veins (apoplexia), brain tumors and sinusitis. Migraine, occurs in up to 25% of all women at the age capable of child-bearing. However a migraine rarely begins during the pregnancy. In the opposite, 70% of all female migraine patients stated an improvement and/or a remission during their pregnancy.

Therapeutic Measures to Relieve Pain

Simple changes in the program of daily activities may already lead to pain relief. The next step is the application of physical measures like water gymnastics for a partial neutralization of the burden of weight, suitable massage and the local use of cold and warmth. In particular chiropractical manipulations at the sacroiliac joint are applicable.
The application of Transcutaneous Electro Nerve Stimulation (TENS) during pregnancy is controversially discussed. In a meta-analysis over ten articles and altogether 877 female patients, it could only be stated that TENS leads to no reliable analgesia and may even cause a delay of more effective treatments.
It is claimed, that acupuncture is able to obtain significantly better results concerning back complaints than physiotherapeutic measures. The application of epidural infiltration of steroids during pregnancy is likewise disputed. It should be considered exclusively with radicular symptomatology.

Use of Drugs During Pregnancy

A medicamentous therapy is willingly avoided during pregnancy. In the first trimenon, ahead of all, the feared teratogenic effect of some pharmaceutics comes to the fore. It is generally accepted, that surgical treatment and anaesthesia of pregnant women are carried out only in an emergency and under strict indication.
A teratogenic effect of opioids is not proven. Even mothers, who take opioids during the entire pregnancy, may give birth to healthy children. A possible withdrawal syndrome appearing with newborn children has to be considered. On the other hand there is a risk of peripartal respiratory depression of the newborn.
Non-Steroidal Anti-Infilammatory Drugs (NSAIDs) in low concentrations according to strict indication can be used during pregnancy. Following the 36th week of gestation, however, high concentrations are contraindicated because of the inhibition of prostaglandine and the danger of a premature occlusion of Ductus Botalli.
Treatment of migraine with sumatriptan must be put-off as long as possible and is to be used only as final or last resort. Drugs containing ergotamine have absolutely to be avoided. Lidocaine and bupivacaine do not seem to represent a risk for the fetus unless they are applied in usual clinical dosage. Lidocain given intravenously in high doses, can be found in low concentration in the mother's milk. Nevertheless, it may be applied with nursing mothers.
Steroids pass the placenta in an order of magnitude of approximately 10% of the maternal blood concentration. They probably represent only a small risk for fetus.
Extensive human studies provided no clues concerning innate deformations related to antidepressives. However, with some drugs such as amitriptiline, nortriptiline and desipramine, neonatal withdrawal symptoms have been reported.
Particularly in the first trimenon, antiepileptic drugs used for pain therapy are to be given only under strict indication. During the nursing phase they do not seem to appear dangerous to the infant. ergotamine-preparations, frequently used for treatment of headache, are provable teratogenics. During the lactation period they can cause convulsions and gastro-intestinal troubles in the infant. High doses of caffeine (> 300 mg/d) given to the parturient can lead to a decreased birth weight.
Beta blockers do not seem to have teratogenic effects. Their concentration in the mother's milk is very low and harmless.


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