Hong Kong Pain Society Annual Scientific Meeting 2010

24 – 25 April 2010 InterContinental Grand Stanford Hong Kong

Unravelling the Mystery of Pain

Programme Book

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HKCYBAA209

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TABLE OF CONTENTS

Welcome Messages	1
Council of the Hong Kong Pain Society	3
Organizing Committee	3
List of Faculty	4
Programme	5
Floor Plan	7
List of Exhibitors	7
Synoncie	(
ASM The field of pain modicine: a reflection of the last 40 years (Dr. Carald Arenaff)	0
The netd of pain medicine. a reflection of the last 40 years (<i>Di. Gerula Atonojj)</i>	0
Phantom limb pain (Dr Ming chi Chu)	9
Parsistant post surgical pain (<i>Drofessor Traels Jensen</i>)	. 10
Spinal cord lesion related neuropathic pain (Dr Vincent Moh)	12
Clinical trials of acumuncture in pain management: the state of play (Dr. Shi ning 7hang)	13
Acupuncture for pain management $_$ as a physical modality versus TCM treatment (Mr Kenny Vuen)	14
Herbal nharmacology in pain management (Dr. 7hi-yiu Lin)	15
Dissecting the mechanisms of pain (Professor Michael Irwin)	16
Chronic opioid treatment for chronic non-cancer pain is it appropriate? (Dr. Gerald Aronoff)	17
New trends in pain pharmacotherapy (Dr Chi-wai Cheung)	18
Placebo response – is it all in the mind? (Dr. Steven Wong)	19
Interventional pain management for musculoskeletal pain – what is the evidence?	
(Dr Murray Taverner)	20
Physiotherapy interventions for low back pain – subgrouping patients with improved efficacy	0
(Mr. Raymond Tsang)	21
Occupational therapy intervention for chronic pain management: strength-based approach	
(Mr. Hei-yi Wong)	22
Recent cognitive behavioural development: acceptance and mindfulness-based interventions	
for lower back pain (Dr. Adrian Tong)	23
Chronic pain and disability – a public health and coordinated care challenge (Dr. Fiona Blyth)	24
Could pain perception process be modulated? (Professor Chetwyn Chan)	25
Podiatry perspective on painful foot and ankle condition (Ms. Helen Chu)	26
Common pain conditions in foot and ankle region (Dr. Ka-ho Ng)	27
Tackling painful knee in sportsman – the challenges! (Dr. Patrick Yung)	28
Advances in cancer pain management (Dr. Annie Kwok)	29
Spiritual pain (Dr. Wai-man Lam)	30
Nursing the "painful" patient (Ms. Maria Pi)	31
Workshops	
Workshop 1: Interventional workshop on radiofrequency techniques for discogenic back pain,	
sacroiliac joint pain and arthritic knee pain (Dr. Murray Taverner)	32
Workshop 2: Assessment of neuropathic pain in primary care (Professor Troels Jensen)	33
Workshop 3: The myth of symptom exaggeration and malingering (Dr. Gerald Aronoff)	34
Workshop 4: Prognostic factors in chronic pain: who will do better and who will not?	
(Dr. Fiona Blyth)	35
Workshop 4: Self-management chronic pain programme for community dwelling elderly suffering	
from musculoskeletal pain (Mr. Schwinger Wong)	36
Workshop 4: Relieve the sufferings of chronic pain - OASIS for elderly pain management	
(Ms. Kam-lee Lam)	37
Acknowledgements	

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WELCOME MESSAGE



Dear friends and colleagues,

Welcome to the 2010 Annual Scientific Meeting (ASM) of The Hong Kong Pain Society (HKPS). The HKPS ASM has become a regular platform for overseas and local experts to exchange experience and for participants to keep abreast of various issues in pain and its management.

In response to the theme of IASP's Global Year of Against Musculoskeletal Pain, relevant topics related to this area will be emphasized in this ASM.

This is also our first attempt in adding a session about Chinese Medicine's (CM) management for pain as the use of CM is prevalent in Hong Kong and the search of its scientific evidence is on-going in different parts of the world. We have also a peri-ASM workshop looking at the more global perspectives of pain, namely, public health and community pain service provision.

In Jan 2010, with the kind support of the Chinese Association of Study of Pain, we are thrilled to be accepted by the International Association of Study of Pain (IASP) to be a Chapter-information. This marks an important milestone for HKPS in joining the big family of professionals in promoting the science, practice, and education in the field of pain. Through strategic planning and action, the HKPS will continue to promote the relief of pain and related sufferings in the local community.

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Dr. Tak-yi Chui President Hong Kong Pain Society

WELCOME MESSAGE





Dear colleagues,

It is my great pleasure to welcome you all to the Annual Scientific Meeting 2010 (ASM) organized by the Hong Kong Pain Society.

The theme for this meeting is "Unravelling the Mystery of Pain". For clinicians or researchers, you may agree with me that the more we know about pain, we would aware that we just don't have the enough knowledge and skills to combat pain. This is a real challenge for us and

we need to take an interdisciplinary approach to face the challenge. This year, there are 6 sub-themes for the conference namely: neuropathic pain management, traditional Chinese medicine therapeutics in pain management, new insights in pain management, conquering disabling low back pain, managing musculoskeletal pain conditions in lower extremities, total care in cancer pain management.

It is our honour to have four world renowned keynote speakers for this meeting. We have Professor Troels Jensen from Denmark, Dr. Gerald Aronoff from the USA, Dr. Fiona Blyth and Dr. Murray Taverner from Australia. This meeting will provide an excellent opportunity for academics and health professionals from various disciplines to share their knowledge and experience in pain management.

Apart from the ASM, we have a total of four pre or post- meeting workshops including interventional workshop, assessment of neuropathic pain in primary care, the myth of symptom exaggeration and malingering, and self management of pain. I have confident that we can broaden our horizons and acquire most updated knowledge in the related area.

Last but not the least, I would like to take this opportunity to thank members of the Organizing Committee for their vision and dedication in making this event a great success.

Wish you all a rewarding and enjoyable conference!

Dr. Gladys Cheing Chairlady, Organizing Committee Annual Scientific Meeting 2010

Unravelling the Mystery of Pain





President:	Dr. Tak-yi Chui	
Vice President:	Dr. Steven Ho-shan Wong	
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Professor Chetwyn Che-hin Chan
Dr. Phoon-ping Chen
Dr. Tak-yi Chui
Ms. Rufina Wing-lum Lau
Ms. Angela Wing-yan Lee
Ms. Mavis Mei-ching Liang
Ms. Yan-mei Yiu

LIST OF FACULTY

Name	Organization	Country	Synopsis
Dr. Gerald Aronoff	Carolina Pain Associates	USA	p8, 17, 34
Dr. Fiona Blyth	The University of Sydney	Australia	p24, 35
Professor Chetwyn Chan	The Hong Kong Polytechnic University	Hong Kong	p25
Dr. Chi-wai Cheung	The University of Hong Kong	Hong Kong	p18
Ms. Helen Chu	Tseung Kwan O Hospital	Hong Kong	p26
Dr. Ming-chi Chu	Prince of Wales Hospital	Hong Kong	p10
Professor Michael Irwin	The University of Hong Kong	Hong Kong	p16
Professor Troels Jensen	Aarhus University	Denmark	p9, 11, 33
Dr. Annie Kwok	Our Lady of Maryknoll Hospital	Hong Kong	p29
Ms. Kam-lee Lam	Evangelical Lutheran Church Social Service	Hong Kong	p37
Dr. Wai-man Lam	Haven of Hope Hospital	Hong Kong	p30
Dr. Zhi-xiu Lin	The Chinese University of Hong Kong	Hong Kong	p15
Dr. Vincent Mok	The Chinese University of Hong Kong	Hong Kong	p12
Dr. Ka-ho Ng	The University of Hong Kong	Hong Kong	p27
Ms. Maria Pi	Hong Kong Buddhist Hospital	Hong Kong	p31
Dr. Murray Taverner	Monash University	Australia	p20, 32
Dr. Adrian Tong	The University of Hong Kong	Hong Kong	p23
Mr. Raymond Tsang	Queen Mary Hospital	Hong Kong	p21
Mr. Hei-yi Wong	United Christian Hospital	Hong Kong	p22
Mr. Schwinger Wong	The Hong Kong Society for the Aged	Hong Kong	p36
Dr. Steven Wong	Queen Elizabeth Hospital	Hong Kong	p19
Mr. Kenny Yuen	David Trench Rehabilitation Centre	Hong Kong	p14
Dr. Patrick Yung	Prince of Wales Hospital	Hong Kong	p28
Dr. Shi-ping Zhang	Hong Kong Baptist University	Hong Kong	p13

The Organizing Committee would like to thank the faculty members for their invaluable contribution to the meeting.

PROGRAMME

ASM: 24 Apri	l 2010 (Saturday) - InterContinental Gra	and Stanford Hong Kong	
08:15 - 08:55	Registration	0 0	
08:55 - 09:00	Opening Remarks		
	Dr. Gladys Cheing, Chairlady, Organizing Committee		
09:00 - 10:10	Plenary Lecture I		
	Session chair: Dr. Phoon-ping Chen		
	• The field of pain medicine: a reflection	of the last 40 years	
	Dr. Gerald Aronoff, USA		
	• The mystery of central post-stroke pain		
	Professor Troels Jensen, Denmark		
10:10 - 10:40	Coffee Break and Exhibition		
10:40 - 12:20	Symposium I: Pearls in Neuropathic	Symposium II: Traditional Chinese	
	Pain Management	Medicine Therapeutics in Pain	
	Session chair: Dr. Anne Chan	Management	
	• Phantom limb pain	Session chair: Ms. Priscilla Poon	
	Dr. Ming-chi Chu, Hong Kong	• Clinical trials of acupuncture in pain	
	Persistent post-surgical pain	management: the state of play	
	Professor Troels Jensen, Denmark	Dr. Shi-ping Zhang, Hong Kong	
	• Spinal cord lesion related neuropathic	• Acupuncture for pain management – as	
	pain	a physical modality versus TCM treatment	
	Dr. Vincent Mok, Hong Kong	Mr. Kenny Yuen, Hong Kong	
		• Herbal pharmacology in pain management	
		Dr. Zhi-xiu Lin, Hong Kong	
12:20 - 13:40	Lunch		
13:40 - 14:50	Plenary Lecture II		
	Session chair: Dr. Steven Wong		
	• Dissecting the mechanisms of pain		
	Professor Michael Irwin, Hong Kong		
	• Chronic opioid treatment for chronic no	on-cancer pain: is it appropriate?	
	Dr. Gerald Aronoff, USA		
14:50 - 15:20	Coffee Break and Exhibition		
15:20 - 17:00	Symposium III: New Insights in Pain	Symposium IV: Conquering Disabling	
	Management	Low Back Pain	
	Session chair: Professor Raymond Cheung	Session chair: Ms. Mary Chu	
	• New trends in pain pharmacotherapy	• Physiotherapy interventions for low	
	Dr. Chi-wai Cheung, Hong Kong	back pain - subgrouping patients with	
	• Placebo response – is it all in the mind?	improved efficacy	
	Dr. Steven Wong, Hong Kong	Mr. Raymond Isang, Hong Kong	
	Interventional pain management	• Occupational therapy intervention for	
	for musculoskeletal pain – what is the	chronic pain management: strength-	
	evidence?	based approach	
	Dr. Murray Iaverner, Australia	Mr. Hei-yi Wong, Hong Kong	
		• Recent cognitive behavioural development:	
		acceptance and mindfulness-based	
		interventions for lower back pain	
10.20 21.55		Dr. Adrian Iong, Hong Kong	
18:30 - 21:30	Faculty Dinner (by invitation)		



ASM: 25 Apri	l 2010 (Sunday) - InterContinental Gran	d Stanford Hong Kong	
08:30 - 09:00	Registration		
09:00 - 10:10	Plenary Lecture III		
	Session chair: Dr. Tak-yi Chui		
	• Chronic pain and disability - a public health and coordinated care challenge		
	Dr. Fiona Blyth, Australia		
	Could pain perception process be modulated?		
	Professor Chetwyn Chan, Hong Kong		
10:10 - 10:40	Coffee Break and Exhibition	Come a since MI. Total Come in Come on Dair	
10:40 - 12:20	Symposium v: Managing Museuleskeletel Dein Conditions in	Symposium VI: Iotal Care in Cancer Pain Management	
	Musculoskeletal Pain Conditions in	Management Session chair: Dr Kam hung Wong	
	Session chair: Professor Chetwyn Chan	• Advances in cancer pain management	
	Podiatry perspective on painful foot	Dr Annie Kwob Hong Kong	
	and ankle condition	Spiritual pain	
	Ms Helen Chu Hong Kong	Dr Wai-man Lam Hong Kong	
	Common pain conditions in foot and	• Nursing the "nainful" natient	
	ankle region	Ms. Maria Pi. Hong Kong	
	Dr. Ka-ho Ng. Hong Kong		
	• Tackling painful knee in sportsman –		
	the challenges!		
	Dr. Patrick Yung, Hong Kong		
12:20 - 12:30	Closing Remarks		
	Dr. Tak-yi Chui, President, Hong Kong Pain	Society	
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00:00 12:00	Just Print 2010 (Friday) – Queen Elizabeth	nospital"	
09.00 - 12.00	Pain Sacroilian Joint Pain and Arthritic Wass Dain		
	Session chair: Dr. Theresa Li		
	Speaker: Dr. Murray Taverner, Australia		
xx7 1 1 3			
Workshop 2:	23 April 2010 (Friday) – Queen Elizabeth	h Hospital*	
14:00 - 10:00	Assessment of Neuropathic Pain in Primary Care		
	Session chair: Dr. Gladys Cheing Sneahar: Professor Trools Lanson Down arb		
	Speaker. 1 rojessor froets jensen, Denmark		
Workshop 3:	25 April 2010 (Sunday) – InterContinent	al Grand Stanford Hong Kong	
14:00 - 17:00	The Myth of Symptom Exaggeration an	d Malingering	
	Session chair: Dr. Tak-yi Chui		
	Speaker: Dr. Gerald Aronoff, USA		
Workshop 4: 25 April 2010 (Sunday) – InterContinental Grand Stanford Hong Kong			
14:00 - 17:00	Self Management of Pain		
	Session chair: Ms. Yan-mei Yiu		
	• Prognostic factors in chronic pain: who	will do better and who will not?	
	Dr. Fiona Blyth, Australia		
	• Self-management chronic pain program	me for community dwelling elderly	
	suffering from musculoskeletal pain		
	Mr. Schwinger Wong, Hong Kong		
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	• Relieve the sufferings of chronic pain –	OASIS for elderly pain management	

* Workshop 1 and 2 are co-organized by the Department of Anaesthesia at Queen Elizabeth Hospital.

FLOOR PLAN



LIST OF EXHIBITORS

Company	Location
Abbott Laboratories Ltd.	5
Health Care & Co.	4
Joinhands Tech Ltd.	3
Merck Sharp & Dohme (Asia) Ltd.	2
Pfizer Corporation Hong Kong Ltd.	1

The field of pain medicine: a reflection of the last 40 years

Dr. Gerald Aronoff

Medical Director, North American Pain & Disability Group, Carolina Pain Associates, USA

The field of Pain Medicine has evolved over the past 40 years as a result of multiple pioneers who brought the evaluation and management of chronic pain to a point that now it is a major subspecialty of medicine. Dr. John Bonica, an anesthesiologist from Seattle, Washington, USA developed the concept of organized pain treatment programs that initially were based on an interventional model process but gradually largely through the efforts of Dr. William Fordyce, the Seattle Pain Center became interdisciplinary. Dr. Bonica's model led to world wide interest in an approach to pain treatment that emerged as the dominant paradigm in pain medicine for the past 40 years. More recently, other pioneers in the field of pain medicine such as Dr. John Loeser and Dr. Dennis Turk have maintained this pain program as a center of excellence.

Dr. Benjamin Crue, a neurosurgeon from California developed a parallel model for pain treatment that emphasized more non-interventional treatment and an interdisciplinary approach to pain management. This approach led to organized treatment programs that focused more on chronic pain rehabilitation emphasizing the importance of pain patients taking an active role in their pain treatment and had a greater emphasis on the biopsychosocial rather than the biomedical treatment model.

Dr. Nathaniel Hollister, a neurosurgeon and psychiatrist adapted Dr. Crue's model in the early 1970s and established a major pain center in Boston, Massachusetts, USA. He became my mentor as we established the Boston Pain Center, one of the early functional restoration pain rehabilitation inpatient pain treatment programs in the United States.

In 1983 Dr. Crue founded and became the first president of the American Academy of Algology that soon became the American Academy of Pain Medicine. I will review many of the important factors that have shaped the direction of Pain Medicine to the present time.

The mystery of central post-stroke pain

Professor Troels Jensen

Professor, Danish Pain Research Center, Aarhus University, Denmark

Stroke is one of the most disabling conditions in the Western World. It is characterized by a series of important symptoms and signs such a hemiparesis, language disturbances, other cognitive deficits etc., which severely disrupts functions and quality of life for patients. Pain is rarely mentioned as a sequelae to stroke, but does in fact occur in a significant number of patients. Pain in stroke includes a variety of pain types including shoulder pain, headache, other types of musculoskeletal pain, pain associated with spasticity and then a mysterious condition called Central Post Stroke Pain (CPSP). CPSP is characterized by pain in those body part that corresponds to the brain area, whose function has been disrupted by the vascular lesion. The syndrome, formerly called the thalamic syndrome, is now known as central post stroke pain because the syndrome can occur also following extrathalamic lesions.

The incidence of post stroke pain was previously claimed to be 1-2%, but newer prospective studies point to figures as high as 8-10% and even higher among patients with stroke. The CPSP syndrome contains many (if not all) the characteristics seen in other neuropathic pain syndromes: no tissue damage, delayed onset, sensory loss, abnormally evoked pain, summation and aftersensations following repetitive stimulation. Allodynia (the evocation of pain by a non-noxious stimulus cold or touch is a particular characteristic feature) in CPSP.

The similarity in clinical manifestations between peripheral and central neuropathic pain conditions point to similarities in pathophysiology. It has been proposed that partial or complete loss of sensory input results in a hyperexcitability in certain neuronal cell populations within the brain and that this forms the basis for the central pain condition. Compatible with this notion the area of pain in CPSP represents only a fraction of the sensory abnormality area, indicating that deafferentation is necessary for the pain. The demonstration of hyperexcitability in the same territory suggest that deafferentation is one aspect and that neuronal hyperexcitability in neuronal pools that have lost an input is another feature.

Based on the assumed underlying mechanism for pain we will describe a rational way to treat these patients, but it is important to point out that at present there is no simple cure for this group of patients.



Phantom limb pain

Dr. Ming-chi Chu Associate Consultant, Department of Anaesthesia & Intensive Care, Prince of Wales Hospital, Hong Kong

The nature of phantom limbs had puzzled patients and clinicians for hundreds of years. While it shares some clinical and pathological similarities with other neuropathic pains, phantoms are notoriously un-responsive to conventional neuropathic pain interventions. Recent developments in Neurology have shed new insights in the possibility of cerebral involvement in the pathogenesis of phantom limbs. These include the complex interplay between visual, tactile and proprioceptive input, and their role in maintaining the body image as well as analgesia. Experiments with virtual reality in these patients also suggested the importance of motor drive in analgesia for phantom. Such findings changed the attention of the therapist: from damping down any excessive peripheral nervous activity, to controlling the central nervous system. They also pave way for a variety of innovative analgesic options, such as mirrors, video games, and motor cortex stimulation.

Persistent post-surgical pain

Professor Troels Jensen Professor, Danish Pain Research Center, Aarhus University, Denmark

Our understanding of nociceptive processing and of plastic changes after persistent noxious input has increased considerably within the last two decades. It is now clear that long-lasting noxious stimulation, inflammation or damage to tissues, which all occur to some extent after surgery may give rise to a neuronal hyperexcitability.

While relative short-lasting and moderate noxious input leads to reversible plastic changes, more intense and long-lasting noxious stimulation implies a risk for persistent and more profound changes in transmitters, receptors, ion channels and in neuronal connectivity. Surgery has within the last years been a documented cause of chronic pain. Common operations such as groin hernia, lung surgery, breast surgery, limb amputation etc. is followed by chronic pain in 5-40% of cases depending on the type of surgery. Certain conditions such as thoracotomy as opposed to hysterectomy are more likely to be associated with pain.

The mechanisms underlying postsurgical pain has until recently been unclear. However, experimental and clinical studies have shown that intraoperative nerve injury is an important factor as many patients do display signs of injury to nerves in the painful area when examined after operation. Other factors such as preoperative functional status, genetic, psycho-social and postoperative factors may also be involved in developing and maintaining chronic pain.

The surgical model represents a unique tool to clarify many unclear pathophysiological mechanisms of neuropathic pain because these patients can be studied carefully and standardised both before, during and after surgery. The postsurgical pain conditions represent an almost clean model for pharmacological interventions for example by studying the effect of preventive measures for development of pain. Examples of such studies will be described.



Spinal cord lesion related neuropathic pain

Dr. Vincent Mok

Associate Professor, Department of Medicine & Therapeutics, The Chinese University of Hong Kong, Hong Kong

Any lesions, be it traumatic, ischemic, or inflammatory, affecting the spinothalamic tract at the spinal cord may be associated with neuropathic pain (NeP). Clinical studies focused in the management of NeP associated with spinal cord injury are few and treatment recommendation has thus been mostly derived from studies that are related to central NeP as a whole or from studies related to peripheral neuropathy. Management of NeP associated with spinal cord lesion may involve several treatment modalities (e.g. medical, non-pharmacological, surgical) and health care disciplines (e.g. anesthetist, neurologist, neurosurgeons, nurses, therapists). In this lecture, I will focus mainly on the pharmacological treatment for NeP associated with spinal cord lesion.

Clinical trials of acupuncture in pain management: the state of play

Dr. Shi-ping Zhang

Associate Professor, School of Chinese Medicine, Hong Kong Baptist University, Hong Kong

Although acupuncture has been used extensively in pain management, clinical trial studies regarding its applicability and efficacy are still much needed for it to be included in the mainstream medical practice. At present, a great number of clinical trials have been conducted in the areas of musculoskeletal pain, with much fewer studies in neuropathic pain and even fewer in visceral pain. The benefits of acupuncture in musculoskeletal pain include short-term reduction in pain and improvement in function, as seen in studies of chronic neck pain, low back pain, lateral epicondylitis, chronic knee pain and heel pain. The long term benefits of acupuncture for these conditions, however, have not yet been established. A number of factors affecting the long-term outcome of acupuncture have been identified. They include the frequency and duration of acupuncture treatment, and the flexibility of acupuncture regime, which are often compromised in clinical trial designs. There are also other confounding factors associated with acupuncture clinical trials, such as different treatments received after the test intervention period and selflimiting nature of some conditions. These issues must be resolved before a solid conclusion can be made regarding the long-term efficacy of acupuncture for musculoskeletal pain. With regards to acupuncture for neuropathic pain, empirical observations are yet to be supported by high quality evidence, although some studies suggest that it may be beneficial for trigeminal neuralgia and herpes zoster pain. As for visceral pain, both positive and negative results have been shown for irritable bowl and angina pectoris. In conclusion, there is strong evidence to support the use of acupuncture for short-term relief of musculoskeletal pain. On the other hand, further clinical trials with improved methodological designs are required to determine the efficacy of acupuncture for other pain conditions.



Acupuncture for pain management – as a physical modality versus TCM treatment

Mr. Kenny Yuen

Physiotherapist I, Physiotherapy Department, David Trench Rehabilitation Centre, Hong Kong

Acupuncture has been introduced as one of the physical modalities in treating pain syndromes and neurological conditions in recent years. Besides, it has become a popular modality in physiotherapy practice, both locally and overseas (Kerr et al, 2001). There are two major theoretical basis of acupuncture – Traditional Chinese Acupuncture (TCA) and Modern Acupuncture (MA). Physiotherapists in Hong Kong nowadays practice Modern Acupuncture with distinguishable differences from that based on TCM, according to the subsection 3 of the Section 108(2) of the Chinese Medicine Ordinance CAP 549. Knowing the differences between TCA and MA may help to choose the best action and adjunctive treatment.

TCA is viewed as an integral part of the TCM. According to the TCM, the workings of the human body are controlled by a vital energy called "Qi", which circulates between different organs along the channels called meridians. When there is obstruction of the flow of Qi through the meridians, illness will result. The goal of acupuncture is to restore the proper circulation of Qi along the meridians.

Modern Acupuncture (MA) is a more recent development practiced by doctors and physiotherapists, which is based on the anatomy, physical diagnosis, neurophysiology and biochemistry, as well as Randomized Controlled Trial (RCT) evidence support. Anatomy enables a better understanding of the exact structure being needled. At the same time, it avoids inadvertent damage to the adjacent structures. Physical diagnosis helps the identification of the problem of the soft tissues involved. This is extremely useful in treating "shortened muscle" problems and "trigger point" problems, in which acupuncture is proved to be effective. Neurophysiology and biochemistry explains the mechanism of the action of acupuncture. Acupuncture is known to produce analgesic effects at segmental level by stimulating the A-delta afferents and at higher level by stimulating the mid-brain to release enkephalin and endorphin, which activate a descending pain inhibition system. RCT studies provide strong evidences to practice.

Herbal pharmacology in pain management

Dr. Zhi-xiu Lin and Dr. Hong-wei Zhang

Assistant Professor, School of Chinese Medicine, The Chinese University of Hong Kong, Hong Kong

Chinese herbal medicine has been used to treat pain since time immortal. Indeed, The Inner Classic of the Yellow Emperor《黃帝內經》, the earliest classical text that lays the theoretical foundation for Chinese medicine, devotes an entire chapter specifically to the discussion of the etiology, pathogenesis and treatment of pain. The strategies used in Chinese medicine for managing pain conditions do not simply aim at stopping pain, but instead places heavy emphasis on resolving the underlying pathomechanisms leading to the manifestation of pain. Basically, any pain in Chinese medicine is regarded as primarily due to the blockage of channels and collaterals, and the impediments of the circulation of the gi and blood in the body. Many pathogenic factors such as wind, cold, summerheat, dryness, dampness, heat, phlegm turbidity, food accumulation, gi stagnation and blood stasis can all give rise to the blockage of the gi and blood in the channels and collaterals. In addition, deficiencies of the body's yin essence, yang qi and blood that fail to nourish the viscera, channels and collaterals, muscles, tendons and bones can also cause pain. Based on the fundamental understandings of pain, Chinese medicine advocates two broad treatment strategies for pain, viz. to expel the pathogenic factors that block the meridians and to supplement the deficiency of the body vital substances. On the practical level, the methods for the former may include expelling wind, dispelling cold, drying and transforming the dampness, clearing heat, dissolving food accumulation, regulating the qi stagnation, invigorating blood circulation and removing blood stasis, and transforming phlegm turbidity; while the methods for the latter may involve nourishing the yin essence, warming and assisting the yang, supplementing the qi and tonifying the blood.

Over the course of the development of Chinese medicine, many materia medica including plants, minerals and animals have been identified and used to achieve the specific therapeutic strategies so that pain can be alleviated. To date, more than 300 Chinese herbs are known to possess analgesic effects. The administration routes of these Chinese materia medica are multiple, such as through oral decoction, topical application, enema, intravenous injection and herbal bathing. It should be emphasized that few of the analgesic Chinese herbs can be applied non-specifically to treat any type of pain, and majority of them can only elicit analgesic effects through ameliorating the underlying causes that contribute to pain. Moreover, Chinese medicine forcefully advocates a paradigm of pattern (syndrome) differentiation and treatment determination, therefore different pain conditions occurring in different individuals may need different treatment strategies and herbal combinations.

On the pharmacological research front, the past several decades have witnessed intensive research in identifying effective and potent analgesics from Chinese herbs. In this endeavor, a number of Chinese materia medica derived from plants or animals have been found to possess active analgesic ingredients via different action mechanisms. Some of the examples are *Radix Aconiti Preparata* 烏頭, *Rhizoma Corydalis* 延胡索, *Radix Aconiti Kusnezoffi* 草烏 and *Pericarpium Papaveris* 罌粟殼.

The presentation will focus on the theoretical basis of using Chinese herbs for pain management, and the pharmacological studies of Chinese herbs for pain and their active principles. Finally, the evidence-based evaluation of the effectiveness of Chinese medicine for pain will be discussed.

Dissecting the mechanisms of pain

Professor Michael Irwin

Professor & Head, Department of Anaesthesiology, The University of Hong Kong, Hong Kong

A thorough understanding of the mechanisms and neurobiology of pain is important for both effective utilisation of current drug regimes and for the future development of new therapeutic targets. Pain is a net result of peripheral and central neuronal sensitisation and a balance between excitatory and inhibitory function at different levels within the nervous system. Peripheral tissue damage and trauma releases neurotransmitters and results in increased local concentrations of arachidonic acid metabolites, including Prostaglandins (PGs) and leukotrienes. In addition to directly activating peripheral sensory nerve fibres, these agents can trigger degranulation of nearby mast cells and sensitise the peripheral nerve terminal to subsequent stimuli. Activation of these nerves will result in the generation of impulses that travel up sensory nerve fibres and synapse in the dorsal horn of the spinal cord. The transmitted impulses will then undergo further modulation before transmission via the thalamus to the cortex where they are perceived as pain. Persistent nociceptive stimuli and inflammation can lead to a number of structural and functional changes along the nerve pathway. Such plasticity of the nervous system may increase the frequency and intensity of the action potentials propagated proximally along a nerve fibre, thus amplifying the pain signal to the Central Nervous System (CNS). Anatomical and chemical changes such as increased substance P and glutamate concentrations occur in the Dorsal Root Ganglia (DRG), causing proliferation and the sprouting of terminals into different laminae of the DRG. Glutamate activates spinal cord amino-3-hydroxy-5-methyl-4-isoxazolepropionate (AMPA) and N-methyl-D-aspartate (NMDA) receptors. Increased sensitivity and responsiveness of central pain-signalling neurons causes increased expression of COX-2 in the spinal cord. This mechanism produces PGs in the Central Nervous System (CNS) influencing central pain sensitisation. It is becoming apparent that poorly controlled pain initiates changes in both peripheral and central nervous systems through inflammation, neuronal hyper-excitability and synaptic function alteration. This can lead to persistence and amplification of pain and possibly even the development of chronic pain states. Pre-emptive analgesia is an antinociceptive treatment that prevents establishment of altered processing of afferent input, thereby diminishing postoperative pain. The concept assumes that, by preventing central pain sensitization, systemic or regional analgesic regimens initiated before the onset of tissue trauma could have effects that outlast the pharmacokinetic presence of the intervention and its efficacy. Our understanding of pain mechanisms makes such a situation scientifically feasible, however, meta analysis of clinical trials has engendered controversy concerning the practical efficacy. Multimodal drug administration techniques targeting different components of pain can improve efficacy while reducing opioid side effects and is another example of effective translational research in this area. NMDA receptors are widely distributed throughout the central nervous system and NMDA receptors in the spinal dorsal horn have been established as central to the development and maintenance of hyperalgesia. Ketamine (NMDA antagonist) is efficacious in reducing postoperative opioid requirements when administered in low doses during surgery but it also may have undesirable side-effects. Acute and chronic peripheral inflammation, interleukins and spinal cord injury increase the expression of COX-2 and release Prostaglandins (PGs) which enhance elicitation and synaptic transfer of pain signals in the spinal cord. NSAIDs inhibit COX-dependent prostaglandin formation but display a wide range of isoform selectivity for COX-2 – with the coxibs at one end of the spectrum and NSAIDs such as naproxen and ibuprofen at the other end. A number of clinical studies suggest that systemic administration of COX-2 selective drugs or NSAIDs with high CSF penetration generally reduce opioid consumption by around 30–40%. Recent work suggests that NSAIDs have additive effects with paracetamol.

Chronic opioid treatment for chronic non-cancer pain: is it appropriate?

Dr. Gerald Aronoff

Medical Director, North American Pain & Disability Group, Carolina Pain Associates, USA

In the US, it is estimated that chronic pain afflicts about 20% of adults, is a frequent cause of emergency room visits and annual missed work days. Although there are studies indicating short and intermediate term efficacy of chronic opioid use there is a paucity of long-term efficacy studies. Recent pain management guidelines published in 2008 based on evidence-based research reviewed by a task force from the American College of Occupational and Environmental Medicine (ACOEM) indicates that there is insufficient evidence to recommend routine use of chronic opioid analgesic therapy in the injured workers with chronic pain. In 2009 the American Pain Society and the American Academy of Pain Medicine published Clinical Guidelines for the Use of Chronic Opioid Therapy in Chronic Noncancer Pain. I will discuss the implications of both documents.

There has been a significant increase in prescription opioid analgesics in the past two decades and data suggests that prescription opioid drug abuse has become as significant a problem currently as illicit drug abuse.

The emphasis of this presentation will be a discussion of patient selection, appropriate patient monitoring, guidelines and recommendations for improving clinical outcomes.



New trends in pain pharmacotherapy

Dr. Chi-wai Cheung

Clinical Assistant Professor, Department of Anaesthesiology, The University of Hong Kong, Hong Kong

With the accumulation of clinical experience and research evidence, pharmacotherapy is one of the important and reliable options for the management of pain conditions including acute, chronic and cancer pain. Belief, pharmacology, and technology in pain medicines are being evoluted. An ideal analgesic should pose the properties of offering excellent pain relief, having no side effects and being safe, which results in good patient's satisfaction. It is desirable using pain medications meeting all the criteria for being ideal. Unfortunately, there is no new pain medications with all such ideal features introduced in last decade. Instead, old pain medications are being re-evaluated for new indications, better pain relief and improved tolerability. Techniques of pharmacotherapy such as multimodal analgesia, preventive analgesia and ways of administration are other areas being actively investigated in order to achieve these goals. Belief and new trends in pharmacotherapy will be highlighted and discussed.

Placebo response – is it all in the mind?

Dr. Steven Wong Consultant, Department of Anaesthesia, Queen Elizabeth Hospital, Hong Kong

Placebo is an inert substance that is used to be given as if it were a real drug. The power of the placebo response was first described by Henry Beecher in 1955 in an article titled "The Powerful Placebo" on JAMA. He demonstrated that about 35% of patients had therapeutic benefits from placebo treatment. These placebo effects were not psychological, but involved "gross physical changes" and "objective effects at end organs that might exceed those attributable to pharmacological action" (Beecher, JAMA 1955).

To explain the placebo response, one must not focus on the chemical constituents of placebo agent but to examine all the other factors apart from the pharmacological effect of the active agent that result in the therapeutic effect. These should involve the environmental and psychosocial context at which the therapy was given to the patients and include factors such as doctor-patient relationship, patients' expectation, and behaviour of health care providers, etc.

The fact that environmental and psychosocial factors can vary greatly across clinical and research contexts accounts for the variability in placebo effect. It was shown that "open" administration of drug is much more effective than "hidden" administration (Amanzio et al, Pain 2001; Benedetti et al, J Neurosci 2003). The difference in the analgesic requirement between "open" and "hidden" administration reflects the placebo analgesic effect.

The mechanism of expectation was likely to be cognitive as it has been shown that placebo analgesia could be learned by conditioning trials and affected by memory of previous experiences (Price et al, Pain 1999). Studies have shown that placebo analgesia operates by both opioid and non-opioid mechanisms.

Understanding of the placebo response has important implications for both clinical trial and clinical practice. While placebo response can be a nuisance in the design of clinical trials, it highlights the importance of psychosocial component of therapy. While it is seldom that we could provide cure for our patients, we should offer them care always.



Interventional pain management for musculoskeletal pain – what is the evidence?

Dr. Murray Taverner

Adjunct Senior Lecturer, Department of Medicine, Monash University, Australia

Pain relief is a basic human right and the desire to alleviate pain and suffering is not new. The biopsychosocial effects of persistent moderate and severe pain have a profound effect on the individual and their family and constitute a serious national and global health problem. Medication, therapeutic exercise, manipulation, non-interdisciplinary rehabilitation, acupuncture, transcutaneous electrical nerve stimulation and cognitive behavioural therapy help many people with mild to moderate pain but do not always help people with moderate or severely disabling pain.

Conventional medical assessment with history, physical examination, psychosocial assessment, modern imaging and neurophysiological testing can only identify the cause of low back pain in a small proportion of patients in the absence of disc herniation and neurological deficit.

Interventional procedures can be loosely classified as diagnostic or therapeutic. The diagnostic blockade of a structure with a nerve supply and the ability to generate pain can be performed to test the hypothesis that the target structure is contributing to the patient's pain, clarify challenging clinical situations and help determine if the patient would benefit from a therapeutic intervention.

Diagnostic facet joint injections & medial branch blocks, provocative discography, sacroiliac joint injections and transforaminal epidural blocks have shown zygapophyseal joints, and intervertebral discs, sacroiliac joints and dorsal root ganglia to be frequent sources of spinal pain. Ligaments, fascia and muscles have been shown to be uncommon sources of spinal pain.

Therapeutic interventional techniques in the management of chronic spinal pain include various types of neural blockade and minimally invasive surgical procedures. These include epidural injections, facet joint interventions, neuroablation techniques, intradiscal therapies, percutaneous disc decompression, vertebral augmentation and implantable devices.

Patients with persistent and disabling pain despite recommended non-interdisciplinary therapies should be offered interdisciplinary rehabilitation (defined as integrated intervention with rehabilitation plus psychological / social / occupational components) as a treatment option¹.

The use of the diagnostic and therapeutic interventional pain management techniques in the context of interdisciplinary rehabilitation with an evidence based algorithmic approach to spinal pain will be presented². Evidence synthesis and recommendations in recent systematic reviews will be discussed¹⁻³.

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Physiotherapy interventions for low back pain – subgrouping patients with improved efficacy

Mr. Raymond Tsang

Senior Physiotherapist, Physiotherapy Department, Queen Mary Hospital, Hong Kong

Low Back Pain (LBP) is prevalent in Hong Kong and worldwide. LBP can be classified into 3 broad categories: non-specific LBP, LBP potentially associated with radiculopathy or spinal stenosis, and LBP potentially associated with another specific spinal cause such as cancer, fracture or infection (Chou et al, 2007). Non-specific LBP is the most common type of LBP and it has no identifiable pathoanatomical cause. Systematic reviews of current interventions for non-specific LBP have found little or no evidence of treatment efficacy. For example, the Cochrane Review of exercise therapy for non-specific LBP (Hayden et al, 2005) concluded that exercise therapy is as effective as either no treatment or other conservative treatments for acute LBP. This apparent lack of evidence of exercise therapy for acute LBP may be explained by the fact that non-specific LBP is a heterogeneous group of patients and exercise therapy is not a single form of intervention (Swinkels et al, 2009). The broad classification of non-specific LBP may disguise subgroups of patients with acute non-specific LBP who can improve with certain type of exercise therapy. A treatment-based classification system utilizes information collected from history and clinical examination to place a patient with acute LBP into a subgroup with recommended interventions (Delitto et al, 1995). The current classification system has 4 basic categories: specific exercise, manipulation, stabilization and traction (Fritz et al, 2007a):

Specific Exercise Subgroup

The principal finding in this subgroup is the presence of centralization of symptoms or a directional preference in reducing pain or improving range of motion during clinical examination. The recommended treatment is the use of repeated, or sustained, end-range movements (extension, flexion or lateral shift) in the direction that caused centralization or of directional preference. Better clinical outcomes had been reported for the extension-specific exercise treatment approach (Browder et al, 2007).

Manipulation Subgroup

Five criteria are identified to define a subgroup of patients likely to benefit from manipulation: current symptom duration <16 days, Fear Avoidance Beliefs Questionnaire work subscale score <19, hypomobility of lumbar spine, hip internal rotation >35°, and symptoms not extending distal to the knee (Flynn et al, 2002). A validation study showed that patients with LBP receiving manipulation who met those criteria had more reductions in pain and disability that did patients who received manipulation but did not meet the criteria (Childs et al, 2004).

Stabilization Subgroup

Four variables have been found to define a subgroup of patients likely to benefit from stabilization exercise: age <40-year, average Straight-leg Raise (SLR) >91°, presence of aberrant trunk movement, and positive prone-instability test (Hick et al, 2005).

Traction Subgroup

Three factors are found to identify patients likely to respond favorably to traction: presence of symptoms distal to buttock and signs of nerve root compression, peripheralization of symptoms with extension movement, and positive contralateral SLR test (Fritz et al, 2007b).

With better match of subgroups of patients with LBP and interventions delivered by physiotherapists, better clinical outcomes would be envisaged.



Occupational therapy intervention for chronic pain management: strength-based approach

Mr. Hei-yi Wong

Occupational Therapist, Occupational Therapy Department, United Christian Hospital, Hong Kong

Chronic pain has now been gradually recognized as a disease on its own. It is a biopsychosocial problem which is notorious for its disabling effect that impinges on all domains of life including Activities of Daily Living (ADL), work, leisure and rest and resulting in the whole lifestyle being offset. Traditionally, a problem-solving approach is adopted for chronic pain management which aimed at tackling various problems arose from pain. Conventional occupational therapy treatment includes splintage, functional training, work conditioning and hardening, as well as ergonomic advice and stress management.

As chronic pain is recognized as a disease which requires long-term management, treatment approach focusing on strengths instead of problems of patients would be more helpful. Strengthbased strategies adopted by occupational therapist include life-coaching which helps to facilitate the life-style re-design process, create happiness and develop resilience to adversities. Throughout the process the therapist functions as a coach to help patient explores their own strength and resources and in turn helps them to live with pain more effectively.

The other strategy would be cognitive intervention which helps to enhance patient's positive thinking and coping skills. The third strategy would be body-mind exercise in form of health qigong which helps in unleashing the body's inner healing resources. By regulating the body, mind and breathing through health qigong practice it helps to improve trunk flexibility, improved mood as well as concentration and better self-efficacy in managing pain and disability secondary to pain.

Recent cognitive behavioural development: acceptance and mindfulness-based interventions for lower back pain

Dr. Adrian Tong

Honorary Assistant Professor, Department of Social Work & Social Administration, The University of Hong Kong, Hong Kong

The general efficacy of cognitive behavioural interventions for the treatment of pain has well been documented by the findings of various meta-analytical reviews. Nonetheless, the role of cognitive changes, the primary process by which CBT is theorized to work in pain reduction remains unclear. Recent developments in CBT have attempted to focus specifically on the process of acceptance and present-focused awareness (i.e. mindfulness) for pain management. In this symposium, I will highlight and focus on this third generation of CBT interventions. In contrast to the control of symptoms, as espoused by the traditional CBT approach, these newer interventions (e.g. Mindfulness-based Pain Management and Acceptance Commitment Therapy) which focused on the acceptance of private events and the promotion of psychological flexibility and valued action, have been found to be promising. It has been argued that an approach focusing on acceptance and mindfulness can contribute to the efficacy of the existing CBT approaches and broadening our understanding about how to bring about change in pain reduction.



Chronic pain and disability - a public health and coordinated care challenge

Dr. Fiona Blyth

Epidemiologist, Pain Management & Research Centre, The University of Sydney, Australia

Chronic pain is increasingly talked about as a chronic condition in its own right and as a major public health problem. In this talk I will explore some of the recent evidence that has emerged from different countries and diverse scientific disciplines that help define chronic pain as both a condition in its own right, and as a significant public health problem. Next I will outline how this emerging evidence could be used to develop a population-focussed approach to managing the burden of chronic pain, and also for minimising the future burden by reducing the progression of acute to chronic pain. Using the example of the 2010 Australian National Pain Summit (the first ever national event of its type). I will then explore some of the barriers that are commonly encountered by clinicians, researchers and policymakers working in the pain field.

Could pain perception process be modulated?

Professor Chetwyn Chan¹, **Mr. Sam Chan**², **Dr. Tak-yi Chui**³ **and Dr. Anne Kwan**⁴ ¹Chair Professor & Head, Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hong Kong ²Department of Rehabilitation Sciences, The Hong Kong Polytechnic University, Hong Kong

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Much work has been done on facilitating individuals who suffer from chronic pain to return to work. Readiness of work, psychosocial status and general health rather than the pain level of individuals are found to significantly predict the success of return to work. Nevertheless, a study by Lai and Chan (2007, 2008) revealed that the gain in pain was a factor which would lower the readiness and confidence of workers to return to work. Other studies also indicated that chronic pain impaired individuals' attention, memory and frontal lobe functions. The question which we recently ask is whether pain perception process can be modulated. The thesis behind our thinking is that by exerting a high-level control to inhibit the natural process of perceiving nociceptive stimulus, sub-painful somato-sensory images can be input to replace the stimulus before it will be perceived and appraised. The outcome is that individual after the inhibition-and-replacement process would perceive lower pain intensity than what could have been perceived from the actual nociceptive stimulus. The down-regulating modulation might bring benefit to those who suffer from it. This presentation will describe the results of the pilot study on both normal and chronic pain individuals. The mechanisms behind this phenomenon will be explained based on the electrophysiological data collected in the study. The clinical applications will also be discussed.



Podiatry perspective on painful foot and ankle condition

Ms. Helen Chu

Podiatrist, Department of Integrated Rehabilitation Service, Tseung Kwan O Hospital, Hong Kong

An average person walks 128,000 kilometers throughout their life time. Foot pain is an unpleasant sensory and emotional experience that can be associated with abnormalities in bones, joints, ligaments, muscles, tendons, fascia, bursae, nerves, skins, nails and vascular structures. Recent research has also shown that foot pain has a detrimental effect on 17%-42% of the adult population. In Australia, 1 in 5 Australians suffered from foot pain, yet only one in five sufferers would seek medical attention. Over 90% of patients diagnosed with rheumatoid arthritis also suffered from foot pain sometime during the course of their disease. In Hong Kong, foot pain is a major complaint to vast majority patients in our daily podiatry practice.

Podiatrists in Hong Kong encounter a wide range of pathological foot and ankle conditions all across different age groups. Examples are congenital and acquired foot deformity, biomechanical foot disorders, pathological nail problems, dermatological disorders, soft tissue injuries, arthritic conditions, foot infection and so on. Podiatrist diagnoses and treats foot and lower limb problems using a range of clinical and therapeutic techniques and works as a primary health care provider as well as member of various multidisciplinary teams to deliver the best overall care for patients. Foot health education is another important service provided by Podiatrists to promote better self care and prevention of future painful foot pathologies. The aim of this keynote is to share the podiatric perspective of painful foot and ankle conditions management in Hong Kong.

Common pain conditions in foot and ankle region

Dr. Ka-ho Ng

Honorary Clinical Assistant Professor, Department of Orthopaedics & Traumatology, The University of Hong Kong, Hong Kong

Structure and function are two tightly interrelated aspects in the foot and ankle region. Disruption of any of these two will lead to painful conditions, constituting the organic causes of musculoskeletal pain of this region. In addition, any concurrent non-organic factors, such as workers compensation litigation, will alter the perception of pain. This global factor in turn will affect the pain and function of the local region.

The twenty-six bones of the foot and ankle form into joints with ligaments attachments for stability and tendon insertions for mobility. On the plantar aspect there is the plantar aponeurosis for maintaining foot shape, and the plantar fat pad for shock absorption and weight bearing. Foot shape is an integral part for interaction of the foot with external environment, ie the biomechanics of the foot. There are two longitudinal arches and one transverse arch. Any disorder that disrupts the structure or shape of foot is a source of pain.

Our feet serve the functions of weight bearing and ambulation. Disruption of these functions will give rise to pain, and conversely any painful condition will have a deleterious effect on these functions. Functionally the foot can be subdivided into three segments. Hindfoot is involved in initial contact with the ground. Midfoot provides stability during midstance. Forefoot serves as effective propulsion in toe-off. Ankle joint connects the foot proximally to the leg and the rest of the body. Malfunction of any of these segments becomes a cause of foot pain. Localizing pain into one of these segments gives an aid to the diagnosis and treatment of foot pain.

Etiology of foot pain can be broadly divided into external injury, abnormal biomechanics, and pathologies of the internal structures.

Foot and ankle pain is approached clinically with history taking on the onset of pain, any associated injury, pre-morbid activity level, medical history, family history, and footwear history. Physical examination includes the foot, ankle, lower limb and back, as well as the stance and gait. Basic investigation includes x-ray standing views of the foot and ankle.

For detection of potential non-organic contributing factors to the pain, enquire about the psycho-social history and functional history surrounding the onset of pain. During physical examination, note any inconsistent physical finding, as well as mismatch of the subjective pain with underlying objective anatomical structure.

Management starts with general pain relief, followed by control of any systemic disease, and local treatment. Orthotics offer rest and symptom relief in the early stage, and provide appropriate support for functional rehabilitation in later stage of management. Abnormality of biomechanics is dealt with by footwear modification, corrective orthosis, or surgery. Physical therapy helps with swelling control, pain relief, range maintainence and muscle strengthening, while occupational therapy targets for specific skill training. For indicated cases, surgery is performed to correct deformity, reconstruct any structural defect, and as salvage procedure for arthritic conditions. Non-organic contributing factors have to be given appropriate consideration and treatment. In all cases a practical treatment outlook should be clearly defined as the common goal of functional recovery for both patient and care-givers.



Tackling painful knee in sportsman – the challenges!

Dr. Patrick Yung

Consultant, Department of Orthopaedics & Traumatology, Prince of Wales Hospital, Hong Kong

Sports participation is now being recognized as an important element of healthy life-style in modern cities like Hong Kong. Growing with the record breaking of numbers of people participating in HK Marathon every year, there are more and more sports related injuries requiring medical attention and treatment. Knee pain sustained from varies different kinds of sports, like running, hiking, football, and basketball games, is one of the most common complaint from sportsman. Some of those problems are acute injuries, which are indeed less common but important to tackle early. However, majority of the sports injuries are chronic or overuse in nature, which usually presented insidiously, but is often being neglected, or taken as "non-treatable" injuries by many sportsmen, or even by many medical practitioners. The difficulties to diagnose and treat these painful knee conditions in sportsman are always full of challenges, but not of any mystery. I am going to highlight the tips and pearls to tackle these common problems encountered by modern people in our daily life.

Advances in cancer pain management

Dr. Annie Kwok

Associate Consultant, Department of Medicine & Geriatrics, Our Lady of Maryknoll Hospital, Hong Kong

Pain is the most common symptom for patients suffered with advanced cancer. Different studies demonstrated that 81-84% of patients with advanced cancer suffered from pain¹⁻². European Association for Palliative Care (EAPC) published its first recommendations on the use of morphine and alternative opioids in cancer pain³. EAPC recommended morphine is the first choice of strong opioid for moderate to severe pain. However a significant minority of patients either suffered from intolerable side effects, inadequate pain relief, or both on one opioid, these patients may benefit from switching to an alternative opioid. Different studies on opioid switching (morphine to methadone and morphine to fentanyl) with different conversion ratio and protocol found beneficial effect on pain control and improvement in side effects⁴⁻⁵. The underlying mechanism may be related to the incomplete cross tolerance with the previous opioids, hyperalgesic state of chronic opioid use and the NMDA antagonist characteristics of methadone.

Despite the advance in cancer pain management, breakthrough pain and neuropathic pain remain a major challenge. Cochrane review of different studies found that Oral Transmucosal Fentanyl Citrate (OTFC) was superior to placebo, normal released morphine and previously rescue medication in providing breakthrough pain. There was no relationship between the dosage of the breakthrough pain and the total daily around the clock opioid⁶. Numerous studies published recently suggest the potential role of wide variety of adjuvant analgesic in managing neuropathic pain. These analgesic included anticonvulsant (carbamazepine, phenytoin, valproic acid, gabapentin and pregabalin) and antidepressant (amitriptyline, paroxetine, citalopram, venlafaxine and duloxetine).

Besides opioids and adjuvant analgesic, bisphosphonates have also shown effectiveness in management of cancer related bone pain. The new generation bisphosphonates like zoledronic acid and ibandronate showed effectiveness in reduce pain score and skeletal related events in different type of cancer⁷⁻⁹.

Notwithstanding all these advances in pharmacology, one should remember the key for good cancer pain control should include the detail pain assessment and the holistic approach of pain management with psychosocial and spiritual care of the patients.

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Spiritual pain

Dr. Wai-man Lam Associate Consultant, Department of Medicine, Haven of Hope Hospital, Hong Kong

The concept of spiritual pain stems from Cicely Saunders' work on Total Pain, which stipulates that pain has physical, psychological, social and spiritual components that make up the "total pain" experience.

Spiritual pain has been defined as "pain caused by extinction of the *being* and the meaning of the self". Love and meaning have been described as the core spiritual needs of a human *being*. Spiritual pain or distress may result when either one of these needs is threatened. In the presence of a life threatening illness, the prospect of death will heighten the patient's awareness that these basic human spiritual needs are in jeopardy. It can manifest in many different ways – excessive fear, uncontrolled pain and symptoms, meaninglessness, hopelessness, sense of burden, wish to hastened death, suicide ideation and act, withdrawal and isolation, to name a few.

Different concepts and models have been developed by researchers to look into the spiritual dimension of a person with advanced disease, with the hope to formulate an intervention plan accordingly. The Dignity model, the Hope model, the Demoralisation model, the Meaning-based model, and the Healing Connections are examples of clinicians' efforts in understanding the entity of spiritual pain. Dignity therapy, strategies to foster hope, meaning-based group psychotherapy, logotherapy, narrative therapy, and life review are some of the interventional tools that have been researched with variable clinical outcomes.

Besides these specific tools, the attitude and the generic human skills of health care workers are essential: genuineness and truthfulness, respect and positive regard, willingness to listen and empathize, understanding the patient as a person, the appropriate use of silence and open questions, and nurturing one's own spiritual needs. The use of a multi-disciplinary approach and use of reviewing and experiential learning in the team will enhance the effectiveness of the team in taking care of these patients in distress.

When facing a patient in pain, we are not only dealing with the nervous system, neurotransmitters, the organ systems, or even the disease itself. We are facing another human being in suffering. To accompany and stand by such patients in their illness journey requires continual reviewing and reflection.

Nursing the "painful" patient

Ms. Maria Pi Ward Manager, Palliative Care Unit, Hong Kong Buddhist Hospital, Hong Kong

Pain is a common symptom among cancer patients. It can be so distributing that influences patient's daily activities-simply as eating, walking or even sleeping, which might be resulting in depression and anxiety. Patients and their relatives may feel helplessness. Pain management requires multidisciplinary team approach which includes physical, emotional, social and spiritual assessment and support.

As nurses, we are the only professional providing round the clock service to our patients. The sensitive observation, delicate care and respect are the core elements for developing a trusting rapport. This relationship enhances the communication and understanding and then promotes the helping process.



Interventional workshop on radiofrequency techniques for discogenic back pain, sacroiliac joint pain and arthritic knee pain

Dr. Murray Taverner

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Back pain is a common complaint. Most patients (>85%) who are seen in primary care have "nonspecific low back pain", which is low back pain that cannot reliably be attributed to a specific disease or spinal pathology by history, examination or modern medical imaging. Although 80% get better and return to work within 2 months, about 20% of people still experience troublesome back pain at 12 months and about 10% report severe disability.

Patient selection for definitive treatment can be guided by interventional diagnostic procedures using radio contrast or anaesthetic agents to provoke or temporarily relieve pain and reduce the number of people with severe or disabling back pain that is labelled with "non-specific low back pain". The intervertebral disc can be shown to be the source of back pain in up to 39%, the facet joints in 15%-40% depending upon age and the sacroiliac joint in 15%-25% of people.

Discogenic Back Pain

The role provocative discography as a diagnostic test for discogenic back pain is controversial and this uncertainty clouds the studies that select patients for interventional treatment based on the results of provocative discography. These techniques remain unproven, patients should be involved in shared decision making and outcomes should be audited and reviewed. The evidence for intradiscal radiofrequency treatments and ramus communicans radiofrequency neurotomy for presumed discogenic back pain will be discussed and demonstrated.

Sacroiliac Joint Pain

Sacroiliac joint (a.k.a. posterior pelvic) pain is a challenging condition affecting 15%-25% of patients with axial low back pain, for which there is no gold standard long-term treatment. Diagnosing sacroiliac joint-mediated pain clinically is difficult because the presenting complaints are similar to those of other causes of back pain. Recent studies have demonstrated that histological, physical examination findings and radiological imaging are insufficient to diagnose sacroiliac joint pain. The most commonly used method of diagnosing the sacroiliac joint as a pain generator is intra-articular injection or small volume local anaesthetic blocks. Treatment modalities described include medications, physical therapy, bracing, manual therapy, injections, radiofrequency denervation and arthrodesis. The evidence for radiofrequency treatments to painful sacroiliac joints will be discussed and demonstrated.

Arthritic Knee Pain

Troublesome knee pain due to osteoarthritis afflicts some 19%-23% of Australians over the age of 40 years. Analgesics, physiotherapy, transcutaneous electrical nerve stimulation, and therapeutic exercise help many people with mild knee arthritis. These treatments frequently do not help people with moderate or severe osteoarthritis, for which there are few proven treatment options apart from joint arthroplasty. This workshop will discuss the evidence for and demonstrate fascial plane selective local anaesthetic nerve blocks around the knee, transcutaneous pulsed radiofrequency treatment and percutaneous pulsed radiofrequency treatment for painful knees.

Assessment of neuropathic pain in primary care

Professor Troels Jensen

Professor, Danish Pain Research Center, Aarhus University, Denmark

Neuropathic pain has been known for centuries and mostly been appreciated in the setting of traumatic nerve injury as seen e.g. following amputation, but also in central lesions such as stroke or spinal cord lesions. Neuropathic pain have been classified in various ways including a classification on basis of symptoms, etiology or anatomical location. A symptom based description includes characteristics such as burning, smarting sticking, stabbing lancinating electric, shooting pains. Recently screening tools have been introduced to classify neuropathic pains mainly based on the characteristic symptoms observed. An etiological classification attempts to classify pains based on the underlying pathology such as neuropathy, herpes zoster, nerve cut, spinal cord injury etc. The anatomical classification of neuropathic pain divides pain according to the location of the lesion i.e. the peripheral nerves, nerve roots, spinal cord, brain etc. None of these classifications are ideal and has the ability to grasp all features of neuropathic pain.

Neuropathic pain has by the International Association for the Study of Pain (IASP) been defined as pain initiated or caused by a primary lesion, dysfunction or transitory perturbation in the peripheral or central nervous system. With this definition a variety of conditions such as fibromyalgia, chronic low back pain, Chronic Regional Pain Syndrome (CRPS) and whiplash associated disorder are included under the umbrella of neuropathic pain, which may be difficult to distinguish from proper neuropathic pain. As a consequence of this unclarity a new and more distinct definition of neuropathic pain has been proposed. According to this neuropathic pain is now defined as pain arising as a direct consequence of a lesion or disease affecting the somatosensory system. Without a gold standard for what constitutes neuropathic pain. In the new proposal it is suggested that neuropathic pain is graded into 3 categories: *possible, probable* and *definite* neuropathic pain. In the primary care setting time constraints and lack of specific knowledge in certain cases may limit the ability to obtain higher level than "possible" neuropathic pain. The use of this classification scheme in primary care will be described.



The myth of symptom exaggeration and malingering

Dr. Gerald Aronoff

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Pain Medicine physicians are accustomed to taking a history from patients and accepting that history at face value. However, frequently those patients may be involved in personal injury litigation or workers' compensation litigation and may give an inaccurate history with significant distortion of the facts for their personal gain. Our findings indicated that treating health care providers often do not consider malingering, even in cases of delayed recovery involving work injuries or other personal injuries, where there may be a significant incentive to feign or embellish symptoms or delay recovery. I will discuss the implications of this issue and offer recommendations to evaluating physicians and other healthcare professionals.

Prognostic factors in chronic pain: who will do better and who will not?

Dr. Fiona Blyth

Epidemiologist, Pain Management & Research Centre, The University of Sydney, Australia

Chronic pain is common, especially in older people, and while it may follow a variety of trajectories over time, the typical pattern is one of persistent symptoms with recurrent periods of acute exacerbation or flare-up. Because of this pattern, effective self-management is an important element of the long-term management of chronic pain. While there is good evidence for the effectiveness of self-management strategies as part of multi-disciplinary treatment programs delivered in specialist settings, current interest focuses on the translation of these findings into community / primary care settings where chronic pain is usually treated. More recently, research attention has also focussed on prognostic risk factors for progression from acute to chronic pain, and also on prognostic risk factors for persistence of pain and disability over time. There is some consistency across different studies of prognostic factors, and some of the common risk factors that can be identified relate to self-management strategies, and how these might be used in the future to influence chronic pain prognosis in the longer-term.



Self-management chronic pain programme for community dwelling elderly suffering from musculoskeletal pain

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Introduction

A self-management Chronic Pain Program was designed for local elderly for promoting their self-management skills and perception of pain in order to alleviate the adverse impact to their daily lives. The aim of this study is to investigate whether this self-management Chronic Pain Program can reduce pain intensity and enhances the everyday functioning of life.

Method

All the subjects had been suffered from musculoskeletal pain (knee pain, shoulder & neck pain, low back pain and leg pain) for three months or more were recruited to participate in this 6-day pain management program from community units of SAGE by consecutive sampling. Chinese version of Brief Pain Inventory (C-BPI) was used to measure pain intensity and interferes to everyday functioning of life.

Results

A total of 323 older persons (44 men; mean age 75 and 279 women; mean age 76) were recruited. About 40% (n = 129) of the elderly suffered from chronic pain for more than 6 years. Total of 47% of the elderly suffered from chronic pain for 4 to 5 years. Before the programme, walking (41.5%) and climbing stairs (37.8%) are the top two stimulate factors of pain in the list, followed by standing and doing household working with 26.3% and 22.9% respectively. The interference of pain at its worst in the last 24 hours, (p < 0.000), pain at its least in the last 24 hours (p = 0.013) and pain on average (p = 0.000) in older adults were reduced significantly after they completed the programme. For the influence of pain on daily life, there was significant reduction on Mood, Relation with other people, Sleep and Enjoyment of life about 40% after the intervention. Meanwhile, Walking ability and Normal work dropped 30%.

Conclusion

This programme can help older adults with chronic pain problems to reduce pain level and interferences of pain to their daily life significantly. It is recommended that other community elderly centres can conduct the same program in order to help more elderly who suffers chronic pain to manage their pain problems more effectively and competently.

Relieve the sufferings of chronic pain – OASIS for elderly pain management

Ms. Kam-lee Lam

Service Supervisor, Ma On Shan District Elderly Community Centre, Evangelical Lutheran Church Social Service, Hong Kong

Chronic Pain has been taken as a common concomitant of late-life illnesses that often threatens the quality of life of older adults. Consequences like depression, anxiety, weakened socialization, sleep disturbance, impaired ambulation as well as increase in healthcare utilization all associate with the prevalence of chronic pain among older adults. It may not be realistic to totally eliminate chronic pain, yet it is important that we do not leave the elders with a sense of hopelessness, worsened with more secondary psychological and social sufferings resulted from neglected or mistreated chronic pain.

Responding to the service gap more proactively, Integrated Elderly Service of ELCSS has started a support program for community dwelling older adults suffering from chronic pain in 2004. It has laid a substantial groundwork to go further. Supported by The Community Chest, Hong Kong, a 3-year Pioneer Project – Oasis for Elderly Pain Management (「緩痛綠洲」長者痛症管理計劃) has been launched since 2007. Adopting a more holistic framework and with active collaboration with multi professional disciplines, it is to strengthen the support for older adults with chronic pain and to reduce its negative influence on their quality of life.

Pain Management Workshop, Pain Management Group and Pain Relief Corner are the core components. Non-pharmacological intervention is the major service mode, ranging from therapeutic groups, thematic workshops, stress-relief activities, pain-relief physiotherapy to counseling service to needy cases. Wider community education via outreach programs, advocacy via media, evidence-based practice, consolidation of practice wisdom via publication and sharing sessions for professionals are taken as valued elements of the project.

Pain Management Groups adopting Cognitive Behavioral Therapy are organized to help the elders re-conceptualize pain, to unlearn unhelpful behaviors, to rebuild more useful behaviors and attitudes. They also find peer support. Pain Relief Corner provides treatments like acupuncture, manual therapy, therapeutic exercise and use of electro-physical modalities. Common manifestations are sciatica and knee osteoarthritis, followed by frozen shoulder, cervical spondylosis and others like capsulitis. With tailored treatment, continuous assessment and education, most users show good improvement. Knowledge of pain conditions and pain management is enhanced. To touch more beneficiaries, professionals of varied disciplines are connected to run a series of thematic Pain Management Workshops. "Practical, skillful, useful, caring" are common feedbacks. They are tangible and experiential enough to motivate the elders to commit more in taking care of their chronic pain and well-being.

Some elders suffer not only from physical pain but also psychological distress and social isolation. Limitation in mobility induced, depressive mood, anxiety, low socioeconomic status, poor family relationship and unfinished life issues can foster their negative perceptions on pain. Yet it is often subjective and self confined, while the SES and reciprocal factors should not be overlooked. Parallel intervention with both physical care and counseling geared to help them negotiate better with the issues is found effective for some "difficult and chronic cases".

With adequate social support, more understanding of chronic pain from others and the older adults themselves, more knowledge-based care plans and timely intervention, ownership shared; with less negligence, taking for granted and misconceptions, they can be much better supported to relieve physical unease and further sufferings from chronic pain.



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Our Objectives:

To promote exchanges of knowledge and foster collaboration among different Specialty Groups (as defined in the Articles of Association) who are interested in the research and management of pain.

To promote training and continued education in the field of pain medicine .

To promote public education and knowledge of pain and its management.

To promote research in the science, practice and development of techniques and technologies related to pain medicine.

To advise relevant regional agencies and organizations on the advances of pain medicine.







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*Symptoms of neuropathic pain

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