The inaugural meeting of the Multidisciplinary Panel on Neuropathic Pain (MPNP) was held in December 2001. Emphasizing the necessity of a multidisciplinary approach to treatment of neuropathic pain, the panel comprises specialists from a broad range of disciplines: neurology, neurosurgery, geriatric medicine, anaesthesiology and orthopaedics.

Over the past 10 years, the MPNP has contributed to neuropathic pain education in Hong Kong through treatment recommendations, newsletters, patient education materials, and workshops and certificate courses. The panel's Web site at www.neuropainhk.org provides a central source for these educational materials. This article is based on interviews with current and former MPNP members.

This 22nd issue of Challenges in Neuropathic Pain marks the 10th anniversary of the Multidisciplinary Panel on Neuropathic Pain (MPNP). Since 2001, the MPNP has provided medical education on neuropathic pain to Hong Kong medical professionals and patients. In this issue we feature an interview with MPNP members on advancements in neuropathic pain over the past 10 years and the achievements of the panel. Other articles in this issue include highlights from the MPNP's Challenges in Neuropathic Pain Workshop, a case presentation on fibromyalgia, the third in the series on non-pharmacological treatments for neuropathic pain with a review on cognitive behavioural therapy, and a summary of an evidence-based guideline on painful diabetic neuropathy. Visit www.neuropainhk.org for more resources from the MPNP on neuropathic pain.

Celebrating 10 years of medical education on neuropathic pain

The inaugural meeting of the Multidisciplinary Panel on Neuropathic Pain (MPNP) was held in December 2001. Emphasizing the necessity of a multidisciplinary approach to treatment of neuropathic pain, the panel comprises specialists from a broad range of disciplines: neurology, neurosurgery, geriatric medicine, anaesthesiology and orthopaedics. Over the past 10 years, the MPNP has contributed to neuropathic pain education in Hong Kong through treatment recommendations, newsletters, patient education materials, and workshops and certificate courses. The panel’s Web site at www.neuropainhk.org provides a central source for these educational materials. This article is based on interviews with current and former MPNP members.

Advances in neuropathic pain management

Neuropathic pain is present with a number of conditions; hence, the diagnosis and treatment are often challenging to the treating physicians. The past 10 years have seen a number of advancements in the field of neuropathic pain management. A major breakthrough has been in the understanding of the pathophysiology and mechanisms involved in the development of neuropathic pain, allowing a more tailored approach to treatment.

Screening and assessment

A number of screening and assessment tools have been developed to assist physicians in identifying patients with pain of predominantly neuropathic origin, including the Leeds As-
New drugs and development of evidence-based guidelines

Evidence-based guidelines on the management of neuropathic pain, such as those from the European Federation of Neurological Societies4 and the International Association for the Study of Pain,5 have helped physicians to better treat patients. The advent of new drugs over the past 10 years, including α-δ ligands (eg, pregabalin and gabapentin) and serotonin-norepinephrine reuptake inhibitors (eg, duloxetine), has expanded the pool of drugs available. The efficacy of these drugs is proven in randomized, controlled trials.6,7 “We now have more potent treatments in the armamentarium to tackle neuropathic pain”, commented Dr Tak Hong Tsoi.

Evolution of clinical practice

The panel members commented that their practices have changed with the introduction of new drugs and better understanding of the pathophysiology and mechanisms of neuropathic pain. “In the past, treatment of neuropathic pain was more or less a trial and error experience. Some doctors thought that the pain was psychological or that the patient was faking it”, mentioned Dr PP Chen. The greater number of medications and the availability of guidelines for neuropathic pain, together with a wider awareness of neuropathic pain conditions amongst family physicians and specialists, have resulted in a wider and earlier use of medications and, hence, better pain control. According to Dr Tak Hong Tsoi, “My impression is that we have fewer patients referred to neurology with pure neuropathic pain, which may be due to better control of pain by other specialties”.

Other changes to practice in recent years include an updated headache classification and diagnosis guideline to aid clinical management of headache, and advances in neuromodulation, such as spinal cord stimulation, and other interventional techniques. Dr Joseph Lam, a neurosurgeon, commented that, “During the past 10 years I have picked up a number of interventional techniques. Radiofrequency neurolysis is a common and effective treatment in many neuropathic pain conditions, for example, trigeminal neuralgia”.

The challenge of neuropathic pain in practice

Members considered that there has been an improvement in awareness of neuropathic pain among Hong Kong medical practitioners, leading to earlier diagnosis and treatment and, hence, reduced suffering of patients. “Improved treatment outcomes are related to earlier treatment, for example in postherpetic neuralgia”, commented Dr Steven Wong. However, some patients remain difficult to treat and should be referred to pain specialists, either in the public or private sector. While awareness has increased, it is important not to become complacent; educational activities and updated information should regularly be made available to all doctors.

As most patients with neuropathic pain will first visit their general practitioner, the panel members have a number of suggestions for investigating and man-

<table>
<thead>
<tr>
<th>Question</th>
<th>Original version</th>
<th>Chinese version</th>
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<tbody>
<tr>
<td>1</td>
<td>Did the pain feel like pins and needles?</td>
<td>你的痛楚是否像被針刺般疼痛?</td>
</tr>
<tr>
<td>2</td>
<td>Did the pain feel hot/burning?</td>
<td>你的痛楚是否灼熱或好像被火燒一樣?</td>
</tr>
<tr>
<td>3</td>
<td>Did the pain feel numb?</td>
<td>你的痛楚是否帶有麻痺?</td>
</tr>
<tr>
<td>4</td>
<td>Did the pain feel like electrical shocks?</td>
<td>你的痛楚是否好像電流一樣?</td>
</tr>
<tr>
<td>5</td>
<td>Is the pain made worse with the touch of clothing or bedsheets?</td>
<td>你的痛楚是否因觸碰衣服或床單而加劇?</td>
</tr>
<tr>
<td>6</td>
<td>Is the pain limited to your joints?</td>
<td>你的痛楚是否只限於關節部位?</td>
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</tbody>
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*Scoring: Questions 1–5: Yes = +1 point; No = 0 points; Question 6: Yes = +1 point; No = 0 points

If the patient scores 3 or more, further examination, investigation and/or specific treatment relevant to neuropathic pain may be warranted.
Working on pain management in Hong Kong, with a multidisciplinary input. The members cite a range of achievements of the panel over the past decade and a number commented that the MPNP has improved local awareness of neuropathic pain amongst healthcare professionals. The MPNP has set up a well-structured education platform on neuropathic pain and its management, including a Web site, newsletters, evidence-based treatment recommendations and regular education activities, such as certificate courses and workshops. “I am happy to see many of the MPNP posters in public and private clinics, and hospitals. It shows that fellow colleagues appreciate our work”, commented Dr Joseph Lam.

Members agree that treatment recommendations, which have all been published in Medical Progress, have been one of the panel’s key achievements. Ten neuropathic pain conditions have been covered by the recommendations (Table 3), and most of these have been updated since their original publication to take into account new drugs, diagnostics and other advances in the field.

This Challenges in Neuropathic Pain newsletter has been published two to three times a year since 2002. The newsletter is a useful forum to provide Hong Kong doctors with updates on the latest guidelines and recommendations, including international guidelines and those from the MPNP, reviews of neuropathic pain conditions and treatments, case presentations and summaries of recently published literature.

A long-term commitment to education on neuropathic pain
The MPNP has been educating Hong Kong physicians and patients for 10 years. A factor in the longevity of the panel has been the dedication, commitment and interest of panel members. “I think we are aware of the deficiency in chronic pain management in Hong Kong, and are willing to contribute to improve the situation so that the local population can enjoy the right treatment”, commented Dr PP Chen. The range of disciplines and mutual respect amongst panel members are also major factors in maintaining the panel’s ongoing projects. Furthermore, the MPNP are grateful for the long-term commitment and support provided by Pfizer. The MPNP would also like to extend their heartfelt appreciation to Dr Sarah Whorlow, Senior Medical Writer, and her colleagues at UBM Medica for their tremendous support and remarkable professionalism, which has contributed to the success of the Panel.

Despite their backgrounds in various disciplines, the members share the common goal of educating and promoting neuropathic pain management in Hong Kong. “Being a member of MPNP gave me the opportunity to work with colleagues from different disciplines for the betterment of patient care”, stated Dr Tsun Woon Lee. Dr Vincent Mok mentioned that he enjoys obtaining further knowledge about neuropathic pain, while Dr Steven Wong enjoys good academic exchange among members. Professor Lawrence Wong emphasized that it was useful to know specialists from other fields.

Future plans
At the MPNP’s inaugural meeting, the members developed the mission statement: “To improve the awareness and understanding of neuropathic pain among the general public and medical practitioners, and to improve the diagnosis, treatment and patient quality of life in Hong Kong”. Over the past 10 years, through a wide range of educational activities, the members have fulfilled this mission statement.

In the future, the members hope to provide more education to patients and the general public as well as support more...
GUIDELINES

Treatment of painful diabetic neuropathy: Summary of an evidence-based guideline from the AANEM, AAN and AAPM&R

The American Association of Neuromuscular and Electrodiagnostic Medicine (AANEM), the American Academy of Neurology (AAN) and the American Academy of Physical Medicine & Rehabilitation (AAPM&R) recently published an evidence-based guideline that considered the efficacy of pharmacological and non-pharmacological treatments in patients with painful diabetic neuropathy (PDN). The key outcomes assessed were reduction in pain and improvement in physical function and quality of life (QoL). Studies were identified from a systematic review of literature from 1960 to August 2008 and classified according to the AAN classification scheme for a therapeutic article (Class I to Class IV). Recommendations were based on the strength of available evidence and are summarized in the Table.

Of the pharmacological treatment options for PDN, the only agent with a Level A (see Table) recommendation was pregabalin; according to the guideline, pregabalin should be offered for the treatment of PDN if clinically appropriate. In the analysis of other anticonvulsant agents, gabapentin and sodium valproate should be considered for the treatment of PDN (Level B). Oxcarbazepine, lamotrigine and lacosamide should probably not be considered (Level B). There is insufficient evidence to support or refute the use of topiramate. The antidepressants amitriptyline, venlafaxine and duloxetine should be considered for the treatment of PDN (Level B), but there is insufficient data to recommend one of these agents over the others; the addition of venlafaxine to gabapentin may improve response. Of the opioids, dextromethorphan, morphine sulfate, tramadol and oxycodone should be considered for the treatment of PDN (Level B); however, the use of opioids was associated with substantial adverse events and chronic use may lead to drug tolerance. Other pharmacological agents that should be considered for the treatment of PDN are capsaicin and isosorbide dinitrate spray (Level B), while clonidine, pentoxifylline and mexiletine should probably not be considered (Level B). There is insufficient evidence to support or refute the usefulness of vitamins and alpha-lipoic acid.

The efficacy of non-pharmacological treatments in the management of PDN was also assessed. Of these, only percutaneous electrical nerve stimulation should be considered for treatment of PDN (Level B), while electromagnetic field treatment, low-intensity laser treatment and Reiki therapy should probably not be considered (Level B).

The authors make a number of recommendations for future research on PDN, including development of a formalized process for rating pain scales in clinical trials; inclusion of measurements of QoL and physical function and standardization of these measures; head-to-head comparisons of different medications and combinations of these medications; trials of longer duration, given that PDN is a chronic disease; standardization of metrics for side effects; assessment of cost-effectiveness of different treatments; and identification of the mechanism of action of electrical stimulation, its role and its mode of application.

**Table. Summary of recommendations for the treatment of painful diabetic neuropathy**

<table>
<thead>
<tr>
<th>Level*</th>
<th>Recommended drug</th>
<th>Dose</th>
<th>Not recommended</th>
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<tbody>
<tr>
<td>A</td>
<td>Pregabalin</td>
<td>300–600 mg/day</td>
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<tr>
<td>B</td>
<td>Gabapentin</td>
<td>900–3,600 mg/day</td>
<td>Oxcarbazepine</td>
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<tr>
<td></td>
<td>Sodium valproate</td>
<td>500–1,200 mg/day</td>
<td>Lamotrigine</td>
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<tr>
<td></td>
<td>Venlafaxine</td>
<td>75–225 mg/day</td>
<td>Lacosamide</td>
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<tr>
<td></td>
<td>Duloxetine</td>
<td>60–120 mg/day</td>
<td>Clonidine</td>
</tr>
<tr>
<td></td>
<td>Amitriptyline</td>
<td>25–100 mg/day</td>
<td>Pentoxifylline</td>
</tr>
<tr>
<td></td>
<td>Dextromethorphan</td>
<td>400 mg/day</td>
<td>Mexiletine</td>
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<tr>
<td></td>
<td>Morphine sulfate</td>
<td>Tritated to 120 mg/day</td>
<td>Magnetic field treatment</td>
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<tr>
<td></td>
<td>Tramadol</td>
<td>210 mg/day</td>
<td>Low-intensity laser therapy</td>
</tr>
<tr>
<td></td>
<td>Oxycodone</td>
<td>Mean 37 mg/day, max. 120 mg/day</td>
<td>Reiki therapy</td>
</tr>
<tr>
<td></td>
<td>Capsaicin</td>
<td>0.075% four times per day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Isosorbide dinitrate spray</td>
<td>PENS for 3–4 weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical stimulation</td>
<td></td>
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</tbody>
</table>

* Level A: Established as effective, ineffective or harmful (or established as useful/predictive or not useful/predictive) for the given condition in the specified population (Level A rating requires at least two consistent Class I studies). Level B: Probably effective, ineffective, or harmful (or probably useful/predictive or not useful/predictive) for the given condition in the specified population (Level B rating requires at least one Class I study or two consistent Class II studies).

PENS, percutaneous electrical nerve stimulation
A meta-analysis of the efficacy and safety of perioperative pregabalin for postoperative pain

This meta-analysis examined the efficacy and safety of perioperative pregabalin for postoperative pain and its effect on analgesic drug use. Eighteen studies involving 1,547 patients were included in the meta-analysis; 850 patients received pregabalin and 697 were control patients.

As daily pregabalin doses ranged from 50 to 750 mg, the studies were grouped and analyzed according to the dose of pregabalin given: 50–100, 225–300 and 600–750 mg/day. The efficacy endpoints were the amount of analgesic drug used during the postoperative period, and postoperative pain at rest and during movement. Safety was assessed by frequency of adverse events eventually attributed to the analgesic treatment. Adverse events were grouped into five categories: nausea or vomiting; somnolence, sedation, drowsiness or fatigue; lack of concentration or confusion; dizziness or light-headedness; and visual disturbances.

Duration of pregabalin treatment ranged from a single dose to 2 weeks; however, the duration was longer than 24 hours following surgery in only four included studies. There was a statistically significant decrease in pain at rest and during movement in pregabalin-treated patients. In studies in which there was no difference in pain at rest between pregabalin and control groups, treatment with pregabalin decreased the amount of analgesic drug use in the 225–300 and 600–750 mg/day groups. The risk of dizziness, light-headedness and visual disturbances was higher with pregabalin, and the occurrence of postoperative nausea and vomiting (PONV) was decreased in patients who did not receive anti-PONV prophylaxis.

The authors concluded that administration of pregabalin for a short duration during the perioperative period provided additional analgesia in the short-term, but was associated with additional adverse events. The lowest effective dose of pregabalin was 225–300 mg/day.

MPNP EVENTS

Challenges in Neuropathic Pain Workshop

The Multidisciplinary Panel on Neuropathic Pain (MPNP) held the Challenges in Neuropathic Pain Workshop on Saturday, 29 October 2011 at the Harbour Grand Hong Kong. The theme of the workshop was inspired by the title of this newsletter. Neuropathic pain encompasses a range of painful conditions, some of which are commonly encountered in practice; however, neuropathic pain can be a challenge to diagnose and manage effectively. The often chronic and sometimes frustrating nature of neuropathic pain also makes it a challenge for patients suffering from these conditions.

The introductory lecture session comprised presentations by Dr Steven Wong, who spoke on recognizing neuropathic pain in practice and Dr Phoon Ping Chen, who discussed the latest recommendations and emerging treatments for neuropathic pain. This was followed by parallel case discussion sessions, the objective of which was to gain insights into diagnosis and evidence-based management of neuropathic pain through interactive case discussion sessions. The topics covered were neuralgias (presented by Dr Chun Por Wong), headache (Dr Tak Hong Tsoi), back pain (Dr Joseph Lam) and musculoskeletal pain and fibromyalgia (Dr Gavin Ka Wing Lee). There was much discussion on the cases presented and the opportunity for delegates to ask questions of the faculty and to share their thoughts on neuropathic pain management.

The MPNP would like to thank the Hong Kong Pain Society and Pfizer for their support of the meeting and those who attended for helping to make the workshop a success.

NON-PHARMACOLOGICAL TREATMENTS FOR NEUROPATHIC PAIN

Part 3: Cognitive behavioural therapy

Cognitive behavioural therapy (CBT) aims to modify a patient’s thoughts, beliefs and behavioural responses to pain and, hence, the experience of pain. This helps to improve daily functioning and quality of life. Given the often chronic nature of neuropathic pain conditions and their impact on a patient’s functioning, CBT is potentially a beneficial complementary therapy to pharmacological management.

While one systematic review of studies in chronic neuropathic pain concluded that there is currently limited evidence available to support the use of CBT, a systematic review and meta-analysis of the efficacy of CBT in fibromyalgia revealed that CBT was associated with an improved ability to cope with pain, and reduction in depressed mood and healthcare-seeking behaviour. Another meta-analysis of psychological treatments for fibromyalgia found that these treatments reduced pain, sleep problems and depression, and improved functional status; furthermore, CBT was significantly better than other psychological treatments in short-term pain reduction. In adults with spinal cord injury (SCI), a meta-analysis of 10 studies found that CBT significantly improved assertiveness, coping, self-efficacy, depression and quality of life. Differences exist between perceptions of pain and pain behaviours in those suffering nociceptive pain or neuropathic pain; hence, pain management programmes may require adaptation for neuropathic pain patients. Nevertheless, CBT may be useful as an adjunct to pharmacological and other non-pharmacological treatments used in neuropathic pain management.

References

Parts 1 and 2 of this series on non-pharmacological treatments for neuropathic pain are available in Challenges in Neuropathic Pain issues 20 and 21 at www.neuropainhk.org.