

---

**The Chronic Pain Acceptance Questionnaire: Confirmatory factor analysis and identification of patient subgroups.**

---

*Vowles KE, McCracken LM, McLeod C, Eccleston C.*

*Pain. 2008 Sep 26.*

Over the past decade, the importance of acceptance of chronic pain has been demonstrated. Acceptance has often been assessed using the 20-item, two factor Chronic Pain Acceptance Questionnaire (CPAQ; McCracken, Vowles, Eccleston, Pain 2004;107:159-66). This two-factor model has been supported but awaits further confirmation. The present investigation sought to address this issue in two large samples of pain sufferers. Exploratory factor analyses (N=333) examined a number of solutions, ranging from two to five factors. Evaluation indices provided clear support for a 20-item, two-factor solution. Confirmatory factor analyses, using the second sample (N=308), examined a number of models. Fit indices demonstrated that the model identified in the exploratory analyses had the best fit. Finally, a series of cluster analyses were performed using a combined sample (N=641). Results indicated three clusters: one with high scores on both subscales (n=146), one with low scores on both subscales (n=239), and one with discrepant scores that were high on the Activity Engagement subscale and low on the Pain Willingness subscale (n=286). Follow-up analyses indicated significant differences among the clusters across multiple measures of functioning. The cluster with low CPAQ scores reported more difficulties in comparison to the group with high scores, while the

group with discrepant CPAQ scores generally reported difficulties that fell in between. These results provide further support for the 20-item, two-factor CPAQ and indicate that it is both theoretically and practically useful.

---

**Sensory neuron voltage-gated sodium channels as analgesic drug targets.**

---

*Momin A, Wood JN.*

*Curr Opin Neurobiol. 2008 Sep 24.*

Voltage-gated sodium channels are crucial determinants of neuronal excitability and signalling; some specific channel subtypes have been implicated in a number of chronic pain conditions. Human genetic studies show gain-of-function or loss-of-function mutations in Na(V)1.7 lead to an enhancement or lack of pain, respectively, whilst transgenic mouse and knockdown studies have implicated Na(V)1.3, Na(V)1.8 and Na(V)1.9 in peripheral pain pathways. The development of subtype-specific sodium channel blockers, though clearly desirable, has been technically challenging. Recent advances exploiting both natural products and small molecule selective channel blockers have demonstrated that this approach to pain control is feasible. These observations provide a rationale for the development of new analgesics without the side effect profile of broad spectrum sodium channel blockers.

---

## **A Primer of Ethical Issues Involving Opioid Therapy for Chronic Nonmalignant Pain in a Multidisciplinary Setting.**

---

*Novy DM, Ritter LM, McNeill J.*

*Pain Med. 2008 Sep 24.*

**ABSTRACT Objective.** This forum presents a clinical vignette of orofacial pain and expounds on ethical issues related to opioid therapy in the context of multidisciplinary treatment. The purpose of this forum is to assist health care providers from different disciplines in identifying ethical issues and conflicts regarding opioid therapy encountered in multidisciplinary clinical pain practices. **Design.** We use the case vignette and opioid therapy as a backdrop for a discussion of 1) an overview of ethics terminology; 2) a presentation of key ethics principles; 3) our conceptualization of ethical obligations of patients regarding opioid therapy; and 4) the process of developing an appropriate treatment plan within the context of the discussed ethical principles.

---

## **Development of a Comprehensive E-Learning Resource in Pain Management.**

---

*Yanni LM, Priestley JW, Schlesinger JB, Ketchum JM, Johnson BA, Harrington SE.*

*Pain Med. 2008 Sep 24.*

**ABSTRACT Objective.** The prevalence of chronic nonmalignant pain (CNMP), the lack of confidence and reward among trainees and providers caring for patients with CNMP, and the lack of a comprehensive curriculum in pain management prompted the creation of the Virginia Commonwealth University (VCU) Chronic Nonmalignant Pain Management curriculum, an innovative e-learning resource. This article describes the development of the curriculum and presents initial evaluation data. **Design.** The curriculum is organized into six modules that cover 20 specific Accreditation Council of Graduate Medical Education competency-based objectives. Broad con-

tent and effective instructional design elements promote its utility among a range of learner levels in a variety of medical disciplines. Results. Twenty-four physician reviewers and over 430 trainees (medical students and graduate medical residents) have evaluated the curriculum. Of the respondents to course evaluation questions, 85.7% (366/427) stated that they would access the practice resources again, 86.3% (366/424) agreed that the treatment of CNMP was more important to them after completing the curriculum, 73.9% (312/422) stated that they would make changes in their behavior or practice, and 92.3% (386/418) stated that they would recommend the curriculum to their colleagues. Qualitative data are uniformly positive. Results of pretest and posttest scores and item analyses have been used to make content changes. **Conclusions.** The VCU Chronic Nonmalignant Pain Management curriculum is an e-learning resource that has the potential to fill a significant training void. Design and content changes have been made as a result of initial evaluation data. Data from ongoing evaluation will allow curricular refinement.

---

## **Medication overuse headache and chronic migraine in a specialized headache centre: field-testing proposed new appendix criteria.**

---

*Zeeberg P, Olesen J, Jensen R.*

*Cephalalgia. 2008 Sep 24.*

Zeeberg P, Olesen J & Jensen R. Medication overuse headache and chronic migraine in a specialised headache centre: field-testing proposed new appendix criteria. *Cephalalgia* 2008. London. ISSN 0333-1024 The classification subcommittee of the International Headache Society (IHS) has recently suggested revised criteria for medication overuse headache (MOH) and chronic migraine (CM). We field tested these revised criteria by applying them to the headache population at the Danish Headache Centre and compared the results with those using the current criteria. For CM we also tested two alternative criteria, one requiring  $\geq 4$  migraine days/month and  $\geq 15$  headache days/month, the second requiring  $\geq 15$  headache days/month and  $\geq$

50% migraine days. We included 969 patients with migraine or tension-type headache (TTH) among 1326 patients treated and dismissed in a 2-year period. Two hundred and eighty-five patients (30%) had TTH, 265 (27%) had migraine and 419 (43%) had mixed migraine and TTH. The current criteria for MOH classified 86 patients (9%) as MOH, 98 (10%) as probable MOH and 785 (81%) as not having MOH after a 2-month drug-free period. Using the appendix criteria, 284 patients (29%) were now classified as MOH, no patients as probable MOH and 685 (71%) as not having MOH. For CM only 16 patients (3%) fulfilled the current diagnostic criteria. This increased to 42 patients (7%) when we applied the appendix criteria. Using the less restrictive criteria of  $\geq 4$  migraine days and  $\geq 15$  headache days, 88 patients (14%) had CM, whereas the more restrictive criteria of  $\geq 15$  headache days and  $\geq 50\%$  migraine days resulted in 24 patients (4%) with CM. Our data suggest that the IHS has succeeded in choosing new criteria for CM which are neither too strict, nor too loose. For MOH, a shift to the appendix criteria will increase the number of MOH patients, but take into account the possibility of permanent changes in pain perception due to medication overuse and the possibility of a renewed effect of prophylactic drugs due to medication withdrawal. We therefore recommend the implementation of the appendix criteria for both MOH and CM into the main body of the International Classification of Headache Disorders.

### **Improved opioid analgesic effect following opioid dose reduction.**

**Vorobeychik Y, Chen L, Bush MC, Mao J.**

*Pain Med.* 2008 Sep;9(6):724-7.

**INTRODUCTION:** Traditionally, opioids have been the cornerstone of therapy for patients suffering from cancer pain, regardless of the potential to develop opioid tolerance. In chronic pain patients who experience worsening pain despite increasing doses of opioids, the clinical role of opioid-induced hyperalgesia is gaining more recognition. **CASE:** Presented here is the case of a 56-year-old man with recurrent squamous cell lung carcinoma and spinal metastases, suffering with intractable 8/10 pain on the visual analog

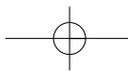
scale in his chest, lower thoracic spine, and upper lumbar spine. He was admitted five times for pain control. In spite of escalating doses of oxycodone, morphine, and hydromorphone, the patient continued to experience severe pain. Also, he endured undesirable sedation, fatigue, and generalized weakness. The clinical picture suggested the possibility of opioid-induced hyperalgesia. We decreased the hydromorphone dose by 40-50% and started methadone. The patient's pain level dropped to a more acceptable 3/10. He was more alert, and his pain was tolerable until his death. **DISCUSSION:** Opioid-induced hyperalgesia might be considered in a patient who has no evidence of disease progression, who is on clinically reasonable doses of opioids, and whose pain escalates as opioid doses are increased. A reduction of opioids and the addition of a low-dose N-methyl-D-aspartate receptor antagonist may provide a favorable clinical outcome in those patients who have failed to benefit from opioid rotation and other adjunctive pain treatments.

### **Pulsed radiofrequency treatment of lower extremity phantom limb pain.**

**Wilkes D, Ganceres N, Solanki D, Hayes M.**

*Clin J Pain.* 2008 Oct;24(8):736-9.

**BACKGROUND:** Phantom limb pain can be challenging to treat. We present a patient who developed severe phantom limb pain after revision of her lower extremity amputation due to the continued progression of peripheral vascular disease. Multiple treatment modalities had been tried without success. Pulsed radiofrequency has been successfully used to manage a number of pain syndromes. **OBJECTIVE:** The present case report describes the use of pulsed radiofrequency treatment for phantom limb pain. **METHODS:** The authors initially performed regional blocks of femoral and sciatic nerve with 0.375% bupivacaine 15 cc and 50 microg clonidine to control the patient's pain. The blocks provided good pain relief but with limited duration. Based on reports of prolonged pain relief provided by pulsed radiofrequency treatment for other chronic pain conditions such as lumbrosacral spondy-



losis, we decided to apply this treatment to the patient's sciatic nerve. The patient underwent pulsed radiofrequency treatment with 2 cycles of 120 seconds at 42 degrees, pulse rate of 2 pulse/second, and pulse duration of 20 milliseconds. RESULTS: Our report shows that the sciatic nerve block with bupivacaine and clonidine, initiated approximately 3 years after amputation, produced modest short-term relief. The pulsed radiofrequency treatment resulted in long-term relief of phantom limb pain. The patient was able to wean herself off all oral medications and has been pain free for 4 months.

