

2006 MANUAL THERAPY AWARDS AND ABSTRACTS

JMMT is pleased to announce the following Manual Therapy Award winners for 2006:

The Cardon Award For Excellence in a Published Research Article

The 2006 Cardon Award for Excellence in a Published Research Article is awarded to *Stan Metcalfe, Hilary Reese, and Robert Sydenham* for their article, *Effect of High-Velocity Low-Amplitude Manipulation on Cervical Spine Muscle Strength: A Randomized Clinical Trial*, which appeared in volume 14, number 3, pages 152–158.

Abstract: Clinical observation suggests that side-to-side differences in anterolateral neck flexor strength may be resolved by appropriate high-velocity low-amplitude manipulation of a dysfunctional upper cervical segment. We examined 67 patients with mechanical neck pain or cervicogenic headaches to evaluate the change in anterolateral neck flexor strength after upper cervical spine manipulation. We used the relative position of the atlas, determined by palpation, to predict the weaker side of anterolateral neck flexor strength. The subjects were randomly assigned to two groups. The control group received spinal manipulation to dysfunctional segments in the lower cervical spine only, and the treatment group received manipulation to dysfunctional segments in both the upper and lower cervical spine. Following manipulation of the upper and lower cervical spine, the predicted weak side of the treatment group showed a greater improvement in strength compared to the predicted strong side. Also, following manipulation, there was a greater increase in strength of the predicted weak side of the treatment group compared to the predicted weak side of the control group. We also studied the interrater reliability of positional palpation of the atlas and determined the relationship between the relative position of the atlas and anterolateral neck flexor strength.



Stan Metcalfe, BSc, PT, FCAMT is a physiotherapist in private practice in Golden, BC, Canada. He graduated from the University of Alberta with a Bachelor of Science degree in Physiotherapy in 1996 and received his Canadian Physiotherapy Association Orthopaedic Division Diploma of Advanced Manual and Manipulative Therapy in 1999. Co-author Bob Sydenham served as his mentor during his first few years of clinical practice with this award-winning paper the product of a novice physiotherapist grasping at the concepts of a master. With his clinical reasoning paradigm stemming from his manual therapy training, Stan's interest lies in better understanding the links between manual techniques and motor skill acquisition.

Hilary J. Reese, BSc, PT, FCAMT, CGIMS is a physiotherapist at LifeMark Health- Academy Place Physical Therapy in Edmonton, AB, Canada. She graduated with a Bachelor of Science in Physiotherapy with Distinction from the University of Alberta in 1995. She subsequently completed her Canadian Physiotherapy Association Orthopaedic Division Diploma in Advanced Manual and Manipulative Therapy in 2000 and became a Fellow with the Canadian Academy of Manipulative Therapists in that same year. Hilary recently completed her Gunn Intramuscular Stimulation (IMS) training in 2005 and practices extensively using IMS. She is currently the secretary/treasurer of



the Canadian Orthopaedic Manipulative Therapist Association (COMTA), and an instructor within the Orthopaedic Division of the Canadian Physiotherapy Association. In recent years Hilary has also instructed extensively as a guest lecturer and clinical assistant with the manual therapy courses at the University of Alberta, Department of Physical Therapy.

Robert W. Sydenham, BSc, D.PT, FCAMT graduated from Washington State University in 1972 with a Bachelor of Science degree in Physical Education and subsequently from the University of Alberta in 1975 with a Diploma in Physical Therapy. He is licensed to practice in Alberta and Washington State and is a member of the Canadian and American Physical Therapy Associations. He is also a member of the Board of Directors of the URSA Foundation, a non-profit organization in Washington State for the teaching of manual medicine, and has been associated with the University of Alberta as a Clinical Assistant Professor of the Department of Physical Therapy in the Faculty of Rehabilitation Medicine. In 1983, he obtained certification status in Orthopaedic Manipulative Therapy (FCAMT) and has taken multiple post-graduate courses while working full time in private practice. Bob is a Past Canadian Representative and a Past President of the International Federation of Manipulative Therapists (IFOMT). He has held and continues to hold positions on various committees of the College of Physical Therapists of Alberta and the Canadian Physiotherapy Association, and is the current President of the Canadian Orthopaedic Manual Therapy Association (COMTA). Bob has lectured, taught courses and consulted in Canada, the US, Jamaica, Trinidad, Barbados, Saudi Arabia, Germany, and China. He has delivered over 20 presentations nationally and internationally and has published in orthopaedic texts and journals. He has opened and operated 15 physical therapy clinics since 1977 and continues to work in private practice for LifeMark Health, in Edmonton, Alberta.



Alberta as a Clinical Assistant Professor of the Department of Physical Therapy in the Faculty of Rehabilitation Medicine. In 1983, he obtained certification status in Orthopaedic Manipulative Therapy (FCAMT) and has taken multiple post-graduate courses while working full time in private practice. Bob is a Past Canadian Representative and a Past President of the International Federation of Manipulative Therapists (IFOMT). He has held and continues to hold positions on various committees of the College of Physical Therapists of Alberta and the Canadian Physiotherapy Association, and is the current President of the Canadian Orthopaedic Manual Therapy Association (COMTA). Bob has lectured, taught courses and consulted in Canada, the US, Jamaica, Trinidad, Barbados, Saudi Arabia, Germany, and China. He has delivered over 20 presentations nationally and internationally and has published in orthopaedic texts and journals. He has opened and operated 15 physical therapy clinics since 1977 and continues to work in private practice for LifeMark Health, in Edmonton, Alberta.

The TherEx Award For Excellence in a Published Case Study

The 2006 TherEx Award for Excellence in a Published Case Study is awarded to *Paul Glynn* and *Joshua Cleland* for their article, *Evidence-Based Approach to the Physical Therapy Diagnosis and Management of Neck and Upper Extremity Pain using Cervical and Thoracic Spine Thrust Manipulation: A Case Report*, which appeared in volume 14, number 3, pages E30–E45.

Abstract: Neck and upper extremity pain are common medical diagnoses for patients seeking physical therapy care. The purpose of this case report is to describe an evidence-based approach to the physical therapy diagnosis and management of a 46-year-old female reporting insidious onset neck pain and bilateral upper extremity paraesthesiae of two years duration. Evaluation of examination data, based on research data with regard to diagnostic accuracy of the tests and measures used, indicated a diagnosis of cervical radiculopathy. Management was based on a treatment-based classification approach and focused on restoring mobility by way of thrust manipulations directed at the thoracic and cervical spine. At the completion of the physical therapy plan of care (8 visits), the patient rated her perceived improvement on the Global Rating of Change Scale as “a very great deal better.” The Numerical Pain Rating Score improved from 6/10 to 0/10. Patient-perceived disability, as measured by the Neck Disability Index, improved from 26% to 0%, and the patient’s score on the modified Oswestry Disability Index improved from 30% to 0%. Bilateral upper extremity paraesthesiae also had completely resolved. These clinically meaningful improvements in pain and perceived disability were maintained six weeks after discharge. While a cause-and-effect relationship cannot be inferred from a case report, it is plausible that an orthopaedic manual physical therapy approach in the management of patients with both neck and upper extremity pain may result in decreased pain and improved function. Further clinical trials are needed to test this hypothesis.

Paul E. Glynn PT, DPT, OCS, FAAOMPT graduated from the University of Massachusetts, Lowell, in 1995 with a Bachelor of Science degree in Exercise Physiology. He



earned his Master of Science in Physical Therapy in 1997. In 2001, he completed a Certificate of Advanced Studies in Orthopedic Physical Therapy from the MGH Institute of Health Professions and went on to become a board-certified Orthopaedic Clinical Specialist in 2002. In 2003, he completed his Doctorate in Physical Therapy at the MGH Institute of Health Professions. Most recently he has completed his manual therapy fellowship training at Regis University in Denver, CO. Paul currently serves as an Orthopaedic Clinical Specialist at Newton-Wellesley Hospital in Massachusetts, while performing affiliate faculty duties in the transitional DPT and fellowship programs at Regis University. Paul is an active presenter for Evidence In Motion Inc., and is currently involved in various research projects involving manual physical therapy.

Joshua A. Cleland, PT, PhD, OCS, FAAOMPT earned a Master of Physical Therapy Degree from Notre Dame College in 2000, the Doctor of Physical Therapy Degree from Creighton University in 2001, and a PhD from Nova Southeastern University in 2006 for his dissertation work titled “*Development of a Clinical Prediction Rule to Identify Patients with Neck Pain Likely to Benefit from Thoracic Spine Manipulation*”. He also recently completed a 6-month Post-Doctoral Research Fellowship at the University of Utah. Josh is currently an Assistant Professor at Franklin Pierce College. He treats patients on a part-time basis and is the Research Coordinator for Rehabilitation Services at Concord Hospital. He received board certification from the American Physical Therapy Association as an Orthopaedic Clinical Specialist (OCS) in 2002. He also recently completed a fellowship in orthopaedic manual therapy through Regis University in Denver, CO. His research interests focus on the identification of subgroups of patients with spinal and extremity disorders that are likely to benefit from a specific physical therapy interventions as well as the specificity of manual therapy techniques. *His research efforts have* led to over 35 peer-reviewed publications. He is an Editorial Review Board Member for the *Journal of Orthopaedic and Sports Physical Therapy* and an Associate Editor for the *Journal of Manual and Manipulative Therapy* and serves as a reviewer for *Physical Therapy, Spine, Manual Therapy, Accountability in Research, Archives of Physical Medicine and Rehabilitation*, and the *Journal of Manipulative and Physiological Therapeutics*. He also recently authored a textbook titled “*Orthopaedic Clinical Examination: An Evidence-Based Approach for Physical Therapists*”.



The OPTP Award For Excellence in a Published Review of the Literature

The 2006 OPTP Award for Excellence in a Published Review of the Literature is awarded to *Jan Dommerholt, Carel Bron*, and *Jo Franssen* for their article, *Myofascial Trigger Points: An Evidence-Informed Re-view*, which appeared in volume 14, number 4, pages 203–221.

Abstract: This article provides a best evidence-informed review of the current scientific understanding of myofascial trigger points with regard to their etiology, pathophysiology, and clinical implications. Evidence-informed manual therapy integrates the best available scientific evidence with individual clinicians’ judgments, expertise, and clinical decision-making. After a brief historical review, the clinical aspects of myofascial trigger points, the interrater reliability for identifying myofascial trigger points, and several characteristic features are discussed, including the taut band, local twitch response, and referred pain patterns. The etiology of myofascial trigger points is discussed with a detailed and comprehensive review of the most common mechanisms, including low-level muscle contractions, uneven intramuscular pressure distribution, direct trauma, unaccustomed eccentric contractions, eccentric contractions in unconditioned muscle, and maximal or sub-maximal concentric contractions. Many current scientific studies are included and provide support for considering myofascial trigger points in the clinical decision-making process. The article concludes with a summary of frequently encountered precipitating and perpetuating mechanical, nutritional, metabolic, and psychological factors relevant for physical therapy practice. Current scientific evidence strongly supports that awareness and working knowledge of muscle dysfunction and in particular myofascial trigger points should be incorporated into manual physical therapy practice consistent with the guidelines for clinical practice developed by the International Federation of Orthopaedic Manipulative Therapists. While there are still many unanswered questions in explaining the etiology of myofascial trigger points, this article provides manual therapists with an up-to-date evidence-informed review of the current scientific knowledge.



Jan Dommerholt, PT, MPS, FAAPM is a Dutch-trained physical therapist and president and owner of Bethesda Physiocare in Bethesda, MD. In addition to his physical therapy education, he has completed a course of study in Performing Artists Disorders at New York University. He has also completed a Master of Professional Studies with a concentration in biomechanical trauma and he is in the final stages of a Doctorate in Health Sciences at the University of St. Augustine for Health Sciences. Jan is a Fellow of the American Academy of Pain Management and a member of many other medical and physical therapy professional organizations. He has published over 40 articles and 17 book chapters on myofascial pain, chronic pain conditions, fibromyalgia, complex regional pain syndrome, and whiplash. He has taught many courses in manual trigger point therapy, dry needling and injection techniques, and lectured at conferences throughout the United States, Europe, South America, and the Middle East world while maintaining an active clinical practice. He is the only physical therapist in the US who teaches trigger point dry needling courses to physicians, dentists, physical therapists, and others health care providers. Jan is on the editorial board of several professional journals and a frequent reviewer of submitted articles for numerous medical and physical therapy journals.

Carel Bron, PT, MT completed his entry-level physiotherapy training in Groningen in the Netherlands in 1979 and from 1983 to 1988 completed a post-graduate diploma in manual therapy at the Stichting Opleiding Manuele Therapie in Eindhoven. He is currently working on his PhD thesis about myofascial trigger points and subacromial impingement syndrome in cooperation with the Centre for Quality of Care Research, University Medical Centre (St. Radboud) of Nijmegen, The Netherlands. Carel works in a private physiotherapy practice in Groningen, specializing in shoulder, arm, and neck dysfunctions. His special interests include myofascial pain syndrome and subacromial impingement syndrome, whiplash-associated disorders, and repetitive strain injuries. He is an instructor for several courses organized in the Netherlands on the topic of myofascial pain syndrome.



Jo Franssen, PT graduated in 1975 from entry-level physiotherapy training at the Stichting Utrechtse Paramedische Academie in Utrecht, the Netherlands and currently works in a private physiotherapy practice in Groningen, specializing in the physical therapy diagnosis and treatment of patients with myofascial pain in the head, neck, shoulder, and, arm region. His special interest areas are surface electromyography applied in chronic pain patients, movement disorders, and workplace assessments. Jo has authored a handbook on surface electromyography in Dutch (1995) and serves as an instructor for several courses about neck, shoulder, and arm disorders, surface electromyography, myofascial pain syndrome, and repetitive strain injuries.