Chiropractic management of myofascial trigger points and myofascial pain syndrome: Summary of Clinical Practice Recommendations from the Commission of the Council on Chiropractic Guidelines and Practice Parameters

#### **Process and Methods:**

The Council on Chiropractic Guidelines and Practice Parameters (CCGPP), was formed in 1995 at the behest of the Congress of Chiropractic State Associations (COCSA) and with assistance from the American Chiropractic Association, Association of Chiropractic Colleges, Council on Chiropractic Education, Federation of Chiropractic Licensing Boards, Foundation for the Advancement of Chiropractic Sciences, Foundation for Chiropractic Education and Research, International Chiropractors Association, National Association of Chiropractic Attorneys and the National Institute for Chiropractic Research.

The CCGPP's mission is to provide consistent and widely adopted chiropractic practice information, to perpetually distribute and update these data as necessary, so that consumers and others have reliable information on which to base informed health care decisions. CCGPP was also delegated to examine all existing guidelines, parameters, protocols and best practices in the United States and other nations with a chiropractic lens. Participation and process have been as transparent as possible and a major goal is to represent a diverse cross-section of the profession on the projects that CCGPP has been involved in.

Six members were appointed to represent COCSA. Other members were appointed by the other organizations that created CCGPP. The CCGPP is a steering organization comprised of 21 individuals. 16 are chiropractors with one in education, one in research and 14 in full-time private practice. There is a vendor representative, a representative from chiropractic colleges and attorneys representing the National Association of Chiropractic Attorneys, as well as a public member. A Scientific Commission with several dozen members reports to and is supervised by CCGPP.

CCGPP identifies and evaluates evidence, which is compiled in a summary document for the chiropractic profession and other related stakeholders. The information contained in these documents is a literature synthesis. A literature synthesis is an academically rigorous analysis of all the available scientific literature on a specific topic. Reviewers use internationally accepted tools to rate each article according to specific criteria. These include the type of study (randomized controlled trial, case series, etc), the quality of the study, size of the study and many other factors which influence the credibility and strength of the study's conclusions. Each reviewer independently rates all the available articles, and the ratings are compared among the members of the review team. When there is disagreement among the reviewers regarding the conclusions, a formal consensus process is followed to arrive at an overall conclusion upon which all reviewers can agree. The resulting conclusions do not represent the reviewers' own beliefs but rather what the literature actually supports.

For this document, team efforts in review, rating, and reporting of literature synthesis were guided, as much as possible, by the widely accepted Appraisal of Guidelines for Research and Evaluation process. The main features included (1) review by a panel of experts; (2) detailed

topic selection based on literature of most common conditions and procedures; (3) structured instruments for rating the quality of and results from the literature; (4) consensus process conducted within the team to adjudicate differences in professional opinion; and (5) wide stakeholder review by patients, professionals, policymakers, and third-party payers. As part of the CCGPP process, these articles were posted in draft form for public comment on the CCGPP Web site www.ccgpp.org (2006-8) to allow for an open process and the broadest possible mechanism for stakeholder input. For this document, the literature searched extended through February 2007.

#### **Results:**

Review of these articles resulted in the following clinical recommendations regarding treatment: Moderately strong evidence supports manipulation and ischemic pressure for immediate pain relief at MTrPs, but only limited evidence exists for long-term pain relief at MTrPs. Evidence supports laser therapy (strong), transcutaneous electrical nerve stimulation, acupuncture, and magnet therapy (all moderate) for MTrPs and MPS, although the duration of relief varies among therapies. Limited evidence supports electrical muscle stimulation, highvoltage galvanic stimulation, interferential current, and frequency modulated neural stimulation in the treatment of MTrPs and MPS. Evidence is weak for ultrasound therapy.

## Summary of Clinical Practice Recommendations

## Conclusion and strength of evidence rating: Manipulation/mobilization

- Rating B: short-term relief. There is moderately strong evidence to support the use of some manual therapies (manipulation, ischemic pressure) in providing immediate relief of pain at MTrPs.
- Rating C: long-term relief. There is limited evidence to support the use of some manual therapies in providing long-term relief of pain at MTrPs.

### Conclusion and strength of evidence rating: Conservative non-manipulation

- Rating A: laser therapies. There is strong evidence that laser therapy (various types of lasers) is effective in the treatment of MTrPs and MPS.
- Rating B: TENS, magnets, and acupuncture. There is moderately strong evidence that TENS iseffective in the short-term relief of pain at MTrPs. There is moderately strong evidence that magnet therapy is effective in the relief of pain at MTrP and in MPS. There is moderately strong evidence that a course of deep acupuncture to MTrPs is effective in the treatment of MTrPs and MPS for up to 3 mo.
- Rating C: electrotherapies, US. There is limited evidence for the effectiveness of EMS, HVGS, IFC, and FREMS in the treatment of MTrPs and MPS. There is conflicting evidence that US is no more effective than placebo or is somewhat more effective than other therapies in the treatment of MTrPs and MPS.

While the recommendations in this document are reflective of the current best available evidence regarding chiropractic intervention for the conditions cited, they are not indicative of the full scope of chiropractic care in these areas. Additional research is recommended to improve the

base of evidence for which anecdotal evidence indicates chiropractic intervention may be appropriate.

# **Conclusions:**

Manual-type therapies and some physiologic therapeutic modalities have acceptable evidentiary support in the treatment of MPS and TrPs.

### Supporting documentation for the above recommendations has been published in:

Vernon H, Schneider M. Chiropractic management of myofascial trigger points and myofascial pain syndrome: a systematic review of the literature. J Manipulative Physiol Ther. 2009 Jan;32(1):14-24.

http://www.jmptonline.org/article/S0161-4754(08)00292-3/pdf