Chiropractic management of tendinopathy: 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 2008.

Results: Review of these articles resulted in the following clinical practice recommendations for chiropractic management of tendinopathy. There is evidence that ultrasound therapy provides clinically important improvement in the treatment of calcific tendonitis. There is limited evidence of the benefit of manipulation and mobilization in the treatment of tendinopathy. Limited evidence exists to support the use of supervised exercise, eccentric exercise, friction massage, acupuncture, laser therapy, use of bracing and orthotics and cryotherapy in the treatment of tendinopathy.

Summary of Clinical Practice Recommendations

Manipulation / Mobilization	RATING C There is limited evidence to support the use of manipulation and mobilization in providing relief of tendinopathy. The intervention is recommended for appropriate patients.
Consothernor	RATING I
Cryotherapy	The intervention is recommended for appropriate patients and has nominal costs and low potential for harm.
Bracing / Orthotics	RATING I
	The intervention is recommended for appropriate patients.
Massage / Friction massage	RATING C
	There is limited evidence to support the use of friction massage in providing relief of tendinopathy.
Ultrasound / Electrical stimulation	Ultrasound: RATING B
	Ultrasound is recommended for appropriate patients.
	Electrical Stimulation: RATING I
	The evidence is insufficient evidence to recommend for or against routinely providing this intervention
Acupuncture	RATING C
type procedures	There is limited evidence to support the use of acupuncture in providing relief for tendinopathy, especially in the area of short term management of

	pain.
Exercise /	RATING B
Eccentric exercise	There is limited evidence to support the use of eccentric exercise in the treatment of tendinopathy.
Laser	RATING I
	There is insufficient evidence to recommend for or against routinely providing this intervention for treatment of tendinopathy.
Extracorporeal shockwave (ESWT) therapy	RATING I
	There is insufficient evidence to recommend for or against routinely providing this intervention for treatment of tendinopathy. Should not be used as first-line approach. There is limited evidence to support the use of high-energy ESWT in calcific rotator cuff tendinopathy.
Surgery	Rating C
	There is limited evidence to support the use of surgery for treatment of tendinopathy in carefully selected patients (after patient has attempted a reasonable trial of conservative therapy). Should not be used as a first-line approach. No systematic reviews were identified.
Topical NSAIDs	RATING C
	There is limited evidence to support the use of topical NSAIDs in the treatment of tendinopathy
Corticosteroid injections	RATING I
	There is insufficient evidence to recommend for or against routinely providing this intervention for treatment of tendinopathy. There is concern related to long-term effects of this intervention although this intervention may provide acute pain relief.

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:

Chiropractors often provide a number of conservative interventions commonly used to treat tendinopathy. More research is needed to assess combinations of manipulation, mobilization

procedures, facilitated stretching and other interventions as this most closely matches current chiropractic practice.

Supporting documentation for the above recommendations has been published in:

Pfefer MT, Cooper SR, Uhl NL. Chiropractic management of tendinopathy: a literature synthesis. J Manipulative Physiol Ther. 2009 Jan;32(1):41-52.

 $\frac{http://download.journals.elsevierhealth.com/pdfs/journals/0161-}{4754/PIIS0161475408002935.pdf}$