The Chiropractic Report

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Professional Notes

Acupuncture – Specific and Non-specific Effects

A large, new, German controlled trial comparing acupuncture, sham acupuncture and conventional medical treatments for patients with chronic low-back pain (LBP) has come up with the surprising result that acupuncture and sham acupuncture are equally effective – and both are markedly superior to conventional medical treatment based on current clinical guidelines.

Even though this suggests that the placebo or non-specific effects of acupuncture are more important than its specific treatment effects, the trial is of such good quality and the results so clear that the German authorities have made acupuncture for chronic LBP an insured benefit, placing it on a equal footing with conventional therapy. Key points from this trial, recently published in English in the American Medical Association's *Archives of Internal Medicine*, are:

a. 1,162 adult patients with chronic LBP (6 months or more – though average

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ACP Backs Spinal Manipulation

Review of new American College of Physicians Guideline on Back Pain

A. Introduction

"For patients with low-back pain who do not improve with self-care options, clinicians should consider the addition of non-pharmacologic therapy with proven benefits – for acute low-back pain spinal manipulation; for chronic or subacute low-back pain intensive interdisciplinary rehabilitation, exercise therapy, acupuncture, massage therapy, spinal manipulation, . . ."

Recommendation 7, Clinical Guideline, American College of Physicians, October 2007.[1]

A generation ago there was little basis for partnership or cooperation between the chiropractic and medical professions in the management of patients with low-back pain. Each profession had a different model and different methods of care. Patients were confronted with sharply conflicting advice, as further explained below.

All that has been steadily changing since the early 1990s, largely because of much new research produced by both professions, working separately and together. And now a comprehensive new clinical practice guideline from the American College of Physicians (ACP) titled *Diagnosis and Treatment of LowBack Pain* and published in the October 2 issue of the *Annals of Internal Medicine*,[1] marks the historic point in time when North American medical and chiropractic practice guidelines with respect to back pain are fundamentally the same.

The new clinical guidelines, prepared for and endorsed by both the ACP and the American Pain Society (APS), say nothing surprisingly new from other back pain clinical guidelines by interdisciplinary expert panels in recent years, such as for example the European Back Pain Guidelines. However they are particularly significant for patients and the chiropractic profession because:

a. The Guidelines are from the ACP, which represents America's internists, and are published in the ACP's prestigious *Annals of Internal Medicine*. This means that they will strongly influence all physicians and primary medical care in the US, and also influence medical practice internationally.

b. The Guidelines are from a panel of medical experts, as opposed to an interdisciplinary team including chiropractic representatives, yet endorse spinal manipulation as a safe option of proven benefit for the great majority of patients with acute (under 4 weeks duration), subacute and chronic (over 3 months) back pain. Manipulation is the only non-drug treatment found to have proven benefit and recommended as a first line option for patients with acute pain.

c. Clinicians/physicians are encouraged to refer patients for manipulation by those with proper training.

d. The evidence for manipulation is found to be at least as strong as for best medical care, any drug therapy, and any other non-drug treatment approach.

e. The Guidelines are published with a Summary for Patients which concludes "doctors and patients should consider the following non-drug treatments for patients who do not respond to self-care: rehabilitation, spinal manipulation, exercise therapy, massage, acupuncture, yoga, progressive relaxation or cognitive-behavioral therapy."

For these reasons this issue of *The Chiropractic Report* looks at the new clinical Guideline in some detail. Note that it is available online at www.annals.org and may be downloaded without charge. First, however, here is where we have come from, here is a summary review of what noted Scottish orthopaedic specialist Dr. Gordon Waddell has called the "revolution" in the medical management of back pain over the past 30 years.[2]

B. Background Review

2. In the early 1980s, there was still no common ground for the chiropractic and medical approaches to the management of patients with back pain – and, as a result, little interprofessional cooperation. Principles of medical practice were:

- Acute and subacute back pain are a biomedical problem
- The focus should be on finding structural pathology and managing pain
- In the absence of major pathology back pain will resolve by itself over time
- The usual approach for common or non – specific pain should be rest and 'wait-and-see'
- Much chronic back pain is largely psychological

On this basis there was little history taken or physical examination made in general medical practice, and seldom any patient-assessed disability or psychosocial assessment. Patients might be referred for imaging or laboratory tests to screen for pathology, but treatment protocol was:

- Bedrest, often two weeks, during a 'wait-and-see' period
- Medication for pain control
- Referral for physical therapy modalities – e.g. TENS, ultrasound, electrical therapies.
- For continuing pain, and if structural pathology was visible on imaging (e.g. disc herniation), steroid injections or surgery.
- Avoid spinal manipulation by anyone, including chiropractors.

3. In contrast, the principles behind chiropractic practice were:

- Back pain is mainly a biomechanical problem – often subluxation or joint dysfunction.
- The focus should be on function and functional pathology, not pain and structural pathology.
- Patients should remain as active as possible – not rest.
- Psychosocial factors are important – the patients should be educated about back pain and its causes, motivated and kept positive. The pain might 'hurt' but would not 'harm' and all would be well.

Chiropractic evaluation focused on imaging for pathology and indications for adjustment/manipulation; similar orthopedic and neurological tests to medical practice; and full spine joint assessment/palpation for pain provocation and dysfunction/subluxation. Treatment protocol was:

- Joint adjustment/manipulation/mobilization
- Trigger-point and other soft-tissue therapies
- PT modalities
- Avoidance of all medications, injections and surgery where possible
- Medical referral after trial of chiropractic treatment

4. Then during the 1980s there was much new research, summarized at that time in this Report, which produced a sea change in medical practice. It became apparent that rest was more harmful than helpful for most patients. The poor correlation between abnormal pathology seen on imaging and pain became known. Was the disc herniation really the source of the patient's back pain now that it was known that approximately 40% of people over age 40 had disc herniations with no symptoms or pain at all?

The danger, cost and inappropriateness of much spinal surgery became evident. The importance of psychosocial aspects of the problem became more clear. Research pointed to the validity and importance of patient assessment of function and disability – which provided more valid and reliable and scientific assessement of results (outcomes) than practitioner measurements. All of this was subsequently described in detail in Waddell's landmark text *The Back Pain Revolution*[2].

5. The modern era of management began in 1994 with publication of national guidelines by multi-disciplinary expert panels in each of the USA (Agency for Health Care Policy and Research, US Department of Health and Human Services)[3] and the UK (Clinical Standards Advisory Group, National Health Service and UK Health Ministers)[4]. These guidelines were based on the new research (i.e. were evidence- based) at a time that all health care practice was moving towards greater reliance on evidence rather then personal experience and tradition – reliance upon hard research evidence and, especially where good research was lacking, a consensus of expert clinical experience. The reasons why new clinical guidelines were important were summarized in the American AHCPR Guidelines:

a. Back pain is very common – 80% of people have a disabling attack of back pain during their lives and 50% of working adults have symptoms of back pain each year.

b. Back pain is a very expensive problem for individuals and society – in terms of treatment costs, disability payments and lost production.

c. There is much inappropriate care – at that time US surgical rates varied by a factor of 5 times according to region, apparently on account of issues relative to surgical practice and number of surgeons available rather than patient characteristics.

d. In the past ten years there had been much new research to guide better approaches to management of patients,

Principles endorsed by these new US and UK guidelines, soon to be followed by guidelines in many other countries , were:

- Approximately 90% of back pain

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patients have non-specific or mechanical back pain, without serious pathology. Accordingly for most patients *functional* pathology is more important than *structural* pathology.

• Back pain is a biopsychosocial problem. Bed-rest should be avoided, with only very limited bed-rest for the most severe cases (2-3 days maximum).

• Patients should be educated about back pain and motivated to keep active despite the pain – which might 'hurt' but will not 'harm'.

• In the absence of significant pathology, and where treatment is necessary, treatments that promote function and activity should be preferred.

• There should be limited use only of medication for pain control, and a trial of conservative, non-invasive treatment approaches before surgery. In summary, the management approach for most patients experiencing an acute episode of back pain should be patient education and encouragement, time-limited use of over-the-counter medications for pain (under two weeks), and spinal manipulation.

Research up to the mid 1990s had confirmed this new approach. We now turn to look at the new American College of Physicians Guideline, which updates the evidence and considers all controlled trial research for all established and many emerging methods of management of back pain up to November 2006.

C. ACP/APS Guideline

6. **Authors and Evidence.** The authors of the Guideline are seven medical experts led by Roger Chou MD from the Oregon Evidence-based Practice Center, Oregon Health and Science University, Portland, Oregon, and Amir Qaseem MD PhD MHA from the American College of Physicians in Philadelphia. Other authors include Paul Shekelle MD PhD from RAND and Stanford University. The larger expert panel that framed questions to be answered in the Guideline included one doctor of chiropractic, Donald Murphy DC of Newport, Rhode Island. The Guideline is based upon:

a. Treatment. Two systematic evidence reviews prepared for the ACP/APS by lead author Chou and Laurie Hoyt Hoffman, also from the Oregon Evidence-based Practice Center. One reviews drug therapies for back pain,[5] the other non-drug therapies[6]. Both are published with the Guidelines and are available online at www.annals.org.

b. Evaluation. An evidence report by Chou and Hoffman on evaluation or assessment methods, to appear in a text titled *Evaluation and Management of Low-Back Pain: Evidence Review* currently being prepared for publication by the ACP.

7. **Purpose.** The Guideline is for use by all clinicians in primary care who care for patients with low- back pain with or without leg pain. Target patient populations are "adults with acute low-back pain not associated with major trauma, children or adolescents with low-back pain, and pregnant women." Additionally, the guideline is meant to cover patients with "myofascial pain syndromes and thoracic or cervical back pain."

8. **Methods.** Methods of grading the effects of treatment, the overall evidence, and the strength of recommendations are given in detail in the paper. For example, the effects of treatment are graded according to three levels:

Small/slight – Mean 5- to 10-point improvement on a 100-point VAS or equivalent pain scale; mean 5- to 10-improvement on the Oswestry Disability Index (ODI), 1-2 points improvement on the Roland Morris Disability Questionnaire (RDQ) or equivalent disability questionnaire for functional status.

Moderate – Mean 5- to 10-point improvement on a 100- point VAS or equivalent pain scale; mean 5- to 10-improvement on the ODI, 1-2 points improvement on the RDQ or equivalent disability questionnaire for functional status.

Large/Substantial – Mean greater than 20- point improvement on a 100-point VAS or equivalent pain scale; mean greater than 20 – point improvement on the ODI, greater than 5 points on the RDQ, or equivalent.

Only randomized controlled trials were admitted as evidence, and these were primarily accessed through published systematic reviews by others, rather than read and reviewed directly. While this approach is common in formal reviews of evidence, Chou and Hoffman do acknowledge that this provides real limitations. Therefore:

a. Many researchers now consider that restricting evidence to RCT's is too narrow – it excludes compelling evidence from well-designed prospective studies by researchers with established reputations.

From a chiropractic perspective one thinks, for example, of the excellent prospective study of chiropractic manipulation for patients disabled by chronic back-pain that was conducted by Kirkaldy-Willis and Cassidy at the University Hospital in Saskatoon, Canada[7]. Following careful diagnosis into sub-categories and a 2-3 week course of skilled manipulation many patients disabled for a average time of many years returned to full function and fitness for work, and that improvement was maintained at 12 months follow up. See Table 1 for further details. Such evidence, because it comes from a prospective study rather than an RCT, was not included in this review.

b. Systematic reviews, by their very nature, are unlikely to produce clear evidence. They average the results of many RCTs according to complex and technical point systems that are far from agreed in the research community. The 69 RCT s of manipulation covered by the systematic reviews adopted by Chou and Hoffman involve treatments given by many professionals with very different training practicing in very different settings. They cover all patients with non-specific back pain in a given population, rather than subsets of patients more amenable to manipulation – for example patients with physical signs rather than psychological signs only.

However, notwithstanding these limitations and as will be seen below, differences in the safety and effectiveness of different treatments have been established by the trials. For this new Guideline no analysis was made of cost effectiveness, patient preference or patient satisfaction. We now turn to consider the specific recommendations made in the Guideline – starting with recommendations on patient evaluation

D. ACP/APS Guideline – Evaluation

9. **Recommendation 1**: Clinicians should conduct a focused history and physical examination to help place patients with low-back pain into 1 of 3 broad categories: non-specific low-back pain, back pain potentially associated with radiculopathy or spinal stenosis,

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Acupuncture – Specific and Non-specific Effects

continued from page 1

duration was 8 years) were randomly assigned to one of three treatment groups, and over a 5 week period received ten 30 minute treatment sessions, generally in 2 sessions per week, of:

- Acupuncture – needling of fixed points chosen on the basis of a TCM diagnosis, with 14 to 20 needles inserted at a depth of 5-60 mm, with manual stimulation of needles but without electrical stimulation or moxibustion.
- Sham acupuncture – a similar number of needles, but to a superficial depth of not more than 3 mm, without any manual or other stimulation, and avoiding known verum points and meridians.
- Conventional therapy –10 sessions with a physician and/or physiotherapist who administered exercise and physical therapies. These patients also received NSAIDs or other pain medication for the 5 week therapy period.

Patients in all groups were also allowed rescue medication for brief periods during the 6 months of the trial including follow up.

b. The primary outcome measures of benefit were a 33% or more improvement in pain severity (Von Korff) and a 12% or more improvement in functional ability (Hanover Functional Disability Questionnaire) 6 months after entry into the trial.

Secondary outcome measures were a 12-item Short Form Health Survey, a global assessment of effectiveness by the patient on a scale of 1 (very good) to 6 (poor), and medication used on rescue basis. Assessments were made at baseline and at 6 weeks, 3 months and 6 months.

c. Results were:

- Almost half of the acupuncture (47.6%) and sham acupuncture (44.2%) patients benefited at the level set for the primary outcomes at 6 months.
- Only about 1 in 4 (27.4%) of patients receiving conventional therapy benefited.
- Accordingly both acupuncture and sham acupuncture were clinically and statistically superior to conventional therapy, but there was no difference between real and sham acupuncture.

Patients in both acupuncture groups also had clinically meaningful better results on all secondary measures, and on all measures at all follow up points during the trial.

d. Haake, Muller et al. express considerable surprise at their results, but confirm that patients remained blinded to which treatments they were receiving at 6 months. The good results from sham acupuncture cannot be explained by the possible presence of further unknown acupuncture points, they note, because needles were inserted only very shallowly and without stimulation to release de Qi. The researchers intended to differentiate the physiologic (specific) from the psychologic (non-specific) effects of acupuncture but found little evidence of any such difference. They explain that they are left with three hypotheses:

- There are no specific acupuncture effects at all
- The specific effect is very small and is overlaid by non-specific effects
- There are still unknown specific effects that lead to symptom improvement independent of point selection and depth of needling, and which modify processing of pain signals by the central nervous system in a stronger manner than conventional therapy.

The authors reference a second recent trial reporting that acupuncture and sham acupuncture produce similar results. Plausible non-specific effects shared by both acupuncture and sham acupuncture they list include positive patient expectations, more intensive clinician contact, and the patient's exposure to and experience of an invasive technique in needling.

(Haake, Muller et al. (2007) *German Acupuncture Trials (GERAC) for Chronic Low-Back Pain*, Arch Intern Med 167 (17):1892-1898)

Exercises for Chronic LBP – How Good is the Evidence?

A new study in *Spine* by van Tulder, Malmivaara et al., one of the authors of which is Canadian chiropractic researcher Jill Hayden, DC PhD, draws attention to the difference between statistical significance and clinical significance – and why this is important in understanding research evidence.

The study illustrates this by looking at exercise therapy for patients with chronic low-back pain. Current evidence, guidelines and evidence-based care – including the new American College of Physicians Guideline discussed elsewhere in this Report – are that exercise therapy has proven value and is appropriate. Some of the evidence is an authoritative Cochrane Collaboration meta-analysis saying this is so.

Van Tulder et al. point out this is wrong. Authors' conclusions in reporting the trials have been "usually too positive". Statistically significant improvement in a trial does not necessarily mean the same thing as significant clinical improvement. Points are:

(a) In this study they reviewed the 43 randomized controlled trials (RCTs) of exercise therapy for patients with chronic low-back pain. Greater improvement in the treatment group patients was considered clinically important if there was:

- A 20% or more advantage on pain scales
- A 10% or more advantage in function/reduced disability

(b) Although 18 trials reported positive conclusions in favor of exercise, this was largely based on statistically significant improvement, and only 7 of the 43 trials showed clinically important differences as defined above.

This seriously undermines the evidence for exercise. Van Tulder et al. recommend that all future trials report on clinical significance as well as statistical significance.

(Van Tulder M, Malmivaara A et al. (2007) *Statistical Significance versus Clinical Importance: Trials on Exercise Therapy for Chronic Low Back Pain as Example*, Spine 32(16):1785-1790.)

World Notes

World Spine Day – Straighten Up Program Goes International. Last year the US Bone and Joint Decade and the International BJD adopted the Straighten Up spinal health exercise program developed principally by the chiropractic profession as the theme for the BJD's World Spine Day October 16. This year on October 16 the Straighten Up Program went truly international, with the World Federation of Chiropractic and many of its national association members involved in numerous public education and media events. These included, for example:

• In Cyprus over 400 people attended a spinal health lecture arranged by the Cyprus Chiropractic Association at the Hilton Hotel in Nicosia, and 40 journalists attended a press conference that gave rise to print, radio and television stories on Straighten Up Cyprus, a Greek version of the program released on World Spine Day.

• The Swedish Chiropractors' Association launched Straighten up Sweden in Swedish, and many regional papers carried stories on the program following lectures and media contacts by association members throughout the country.

• In the UK the British Chiropractic Association launched its new www.straightenupuk.org website, and received national and regional media coverage on release of a BCA-commissioned survey on adolescent back pain titled *The Back Breaking Consequences of Today's Teen Lifestyle* – see the website for more information.

• Dr. Patrick Sim, a national spokesman for the Chiropractors' Association of Australia, was interviewed on spinal health on a radio program that was aired across the country, and the Sydney Morning Herald and other major newspapers carried feature stories on Straighten Up Australia and spinal health provided by the CAA

• In the US in Atlanta Life University faculty member Dr. Milagros Ricardo reached the global Spanish-speaking community on the importance of spinal health in a live interview on CNN En Espanol.

• In Seoul, South Korea 200 legislators, government officials and members of the public attending a Chiropractic Symposium at the National Assembly organized by the Korean Chiropractic Association were on their feet being led through the Straighten Up Program by Dr Carol Lynn Grubstad of the Georgia and American Chiropractic Associations.

Are you using the Straighten Up Program daily? Are you using it to promote spinal health and good posture with your patients and in your community? Join this growing at an effective movement for spinal health now. Start at the above websites or straightenup america.org.

Brazil. In July the Pan American Games were held in Rio de Janeiro and the host country of Brazil had 3 chiropractors on its sports medicine team. Other countries who had arranged for their athletes to have sports chiropractors as part of their support services were Bolivia, Canada, Colombia, Costa Rica, the Dominican Republic, Haiti, Jamaica, Mexico, Saint Vincent, Trinidad and Tobago, the United States and Venezuela.

Spain. The newly-appointed faculty leader for Spain's first school of chiropractic, which opened at the Royal Maria Christina University (RCU) in Escorial near Madrid in October, is Dr Ricardo Fujikawa of Brazil. Dr Ricardo, who has qualifications in chiropractic and medicine, is a Palmer College graduate who has served in recent years as leader of the chiropractic program at Feevale Central University in Novo Hamburgo, Brazil.

Dr Ron Kirk, founder of the Straighten Up Program, Dr Milagros Ricardo and Dr Vilna Wagoner at CNN in Atlanta on World Spine Day

Switzerland. September1, 2008 was an historic date for chiropractic in Switzerland. Chiropractic services have been included in Swiss federal laws and sickness insurances for some years, but as an exception rather than on the basis of full recognition and integration. September 1 was the day that revised Swiss medical laws came into force, recognizing five major health professions on an equal basis in the health care system – chiropractic, dentistry, medicine, pharmacy and veterinary medicine. Swiss law requires all citizens to hold basic sickness insurances – and from this point all such policies must include chiropractic services on terms agreed by the government and the Association of Swiss Chiropractors.

United States of America. The treatment phase of the Medicare Demonstration Project, a pilot study of the impact of providing wider chiropractic benefits to patients in the federal Medicare program for seniors (65 and older), is now complete and the report with a formal assessment of results is due next March. There is confidence that this will show similar patient results and satisfaction levels as were seen in the Department of Defense and Veterans' Administration pilots that led to expanded chiropractic services in the military and VA health care systems. Currently 40 of the 160 VA hospitals have staff doctors of chiropractic. Decisions following the Medicare trial are particularly important because they will likely influence the degree to which chiropractic service are covered in a US national health care plan that most expect to finally see established in 2009 under the next administration.

At the ACA House of Delegates meeting in Washington DC in September Dr Glenn Manceaux of Louisiana was elected president, Dr John Gentile of Florida Chairman of the Board, and the ACA HOD passed a market identity policy statement that closely follows that adopted internationally by the membership of the World Federation of Chiropractic in 2005 – the lead concept of which is expertise in spinal health. For details of the WFC-approved identity visit www.wfc.org and click on *the spinal health care experts* at the home page.

Table 1

Kirkaldy-Willis and Cassidy Study.

A population of 283 chronic LBP patients disabled from work or other activities by constant, severe pain for an average of approximately 8 years, and referred to a hospital orthopedic department after failing to respond to various treatments, were assessed for specific joint dysfunction by a chiropractor (e.g. posterior joint syndrome, sacroiliac joint syndrome). Those found to have joint dysfunction/subluxation received daily spinal manipulation from an experienced chiropractor for a period of 2 to 3 weeks together with encouragement, education and advice.

- For the 171 patients with posterior joint syndrome and/or sacroiliac syndrome, each had been disabled by pain for an average of 8 years. Following the 2 to 3 week regime of daily adjustments 87% returned to full function with no restrictions for work or other activities. No patient was made worse. The 87% success rate was maintained when the patients were reviewed after 12 months. Some had had a further short course of manipulation/adjustment during the follow-up period.
- In a sub-group of 11 patients with clear evidence on imaging of central spinal stenosis, but also evidence of specific joint dysfunction on a chiropractic diagnosis, four (36%) were returned to full function within 2 to 3 weeks following a course of chiropractic adjustment. This recovery rate was maintained at 7 months follow-up. Notably, this group of patients had experienced average total disability from chronic back and leg pain for 16.9 years. Kirkaldy-Willis and Cassidy's explanation is that the pain and disability apparently arose from the functional problem (joint dysfunction) rather than the structural one (central stenosis).

Kirkaldy-Willis WH and Cassidy JD, Canadian Family Physician, 1985[7]

or back pain potentially associated with another specific spinal cause. The history should include assessment of psychosocial risk factors, which predict risk for chronic disabling back pain

Comment. The Guideline notes that "more than 85% of patients who present to primary care" have non-specific low back-pain not reliably attributable to a specific spinal abnormality, and, interestingly, that psychosocial factors and emotional distress should be assessed "because they are stronger predictors of low-back pain outcomes then either physical examination findings or severity and duration of pain".

10. **Recommendation 2:** Clinicians should not routinely obtain imaging or other diagnostic tests in patients with non-specific low-back pain.

Comment. There should be a reason from the history for imaging and other laboratory tests. Attention is drawn to the problems of false positives (attributing pain to radiographic abnormalities that are in fact not related to the pain) and unnecessary exposure to radiation (gonadal radiation from two plain x-ray views of the lumbar spine is equivalent to daily chest x-rays for more than one year).

11. **Recommendation 3:** Clinicians should perform diagnostic imaging and testing for patients with low back- pain when severe or progressive neurologic deficits are present or when serious underlying conditions are suspected on the basis of history and physical examination.

Comment. MRI is preferable to CT if available because of the absence of ionizing radiation and because "it provides better visualization of soft-tissues, vertebral marrow and spinal canal."

12. **Recommendation 4:** Clinicians should evaluate patients with persistent low-back pain and signs or symptoms of radiculopathy or spinal stenosis with magnetic resonance imaging (preferred) or computed tomography only if they are potential candidates for surgery or epidural steroid injection (for suspected radiculopathy).

Comment: The natural history of lumbar disk herniation with radiculopathy is generally for "improvement in the first four weeks with non-invasive management". New patients are not potential candidates for surgery or epidural steroid injections, and not in need of MRI/CT, unless there are "persistent radicular symptoms despite non-invasive therapy."

E. ACP/APS Guideline – Treatment

13. **Recommendation 5:** Clinicians should provide patients with evidence-based information on low-back pain with regard to their expected course, advise patients to remain active, and provide information about effective self-care options.

Comment: Self–care education materials, such as The Back Book, are recommended as a supplement to clinician advice and information. For short-term relief from acute LBP there is better evidence for the effectiveness of heat from heating pads or heated blankets than cold packs, lumbar supports, or other forms of self-care.

14. **Recommendation 6:** For patients with low-back pain, clinicians should consider the use of medications with proven benefits in conjunction with back care information and self-care. Clinicians should assess severity of baseline pain and functional deficits, potential benefits, risks, and relative lack of long-term efficacy and safety data before initiating therapy. For most patients, first-line medication options are acetaminophen or nonsteroidal anti-inflammatory drugs.

Comment: Various medications have "moderate primarily short-term benefits" for patients with acute LBP, but all have risks and the key message given is to use them for the shortest periods necessary. Acetaminophen is a "slightly weaker analgesic" then NSAIDs but is safer. The main safety concern is "elevated aminotransferase levels".

Non- selective NSAIDs provide more pain relief but have "well- known" gastrointestinal, renovascular and cardiovascular risks. Clinicians prescribing NSAIDs should "recommend the lowest effective doses necessary." A limited role for other drugs with more substantial risks, such as opioid analgesics, muscle relaxants and antidepressants, is discussed. Interestingly, the herbal therapies of devil's claw, willow bark and capsicum are approved. These, it is said, have " small to moderate" proven benefit and are safe.

15. **Recommendation 7:** For patients who do not improve with self-care options, clinicians should consider the addition of nonpharmacologic therapy with proven benefits—for *acute* low-back pain, spinal manipulation; for *chronic* or *sub-acute* low back pain, intensive interdisciplinary rehabilitation, exercise therapy, acupuncture, massage therapy, spinal manipula-

tion, yoga, cognitive-behavioural therapy, or progressive relaxation.

Comment: For acute LBP (an episode of pain for less than four weeks) spinal manipulation is the only non-drug treatment with proven effectiveness and recommended. It should be "administered by providers with appropriate training". Supervised and home exercise therapies are found not effective. They have value for patients with chronic LBP, but "the optimal time to start exercise therapy after the onset of pain remains unclear." For chronic back pain, " moderately effective " non-drug therapies include:

a. Exercise programs. Those that incorporate individual tailoring, supervision, stretching and strength have the best results.

b. Spinal manipulation. There is insufficient evidence, it is said, to conclude whether manipulation by those trained in one profession has more benefit than manipulation by other trained professionals. In other words, there is no positive or negative finding on the point.

c. Acupuncture. See the separate item on a new German acupuncture trial elsewhere in this Report under Professional Notes (page 1).

d. Other. The other therapies with evidence with moderate effectiveness are massage therapy, yoga, cognitive behaviour therapy or progressive relaxation, and intensive interdisciplinary rehabilitation. Treatments not proven effective include TENS, intermittent or continuous traction, acupressure, interferential therapy, low-level laser therapy, short-wave diathermy, ultrasonography and back schools. Some trials show short-term benefits from back school, but the evidence is too inconsistent to support a recommendation.

When should clinicians consider consultation with a specialist when patients with non-specific LBP do not respond to non-invasive therapies? There is "insufficient evidence to guide specific recommendations on the timing of or indications for referral" but attention is drawn to the fact that other guidelines suggest a minimum of 3 months to 2 years, and that trials of surgery for patients with non-specific LBP have only included patients "with at least one year of symptoms."

Patient Preference or Choice. All treatments recommended are given a "moderate quality" rating for evidence in support, on a three point scale of high, moderate and low, and it is concluded that "there is insufficient evidence to recommend any specific treatment as first line therapy," whether a specific drug or non-drug therapy. In these circumstances it is important to involve the patient in the choice of treatment as it is known that patient expectations of benefit from a treatment influence results. The Guideline is clear on this point –"patient expectations of benefit from a treatment should be considered when choosing interventions".

Other Points. Other points of note include:

a. Comparison of Drug versus Non-Drug Treatment. In a Guideline from a medical association it is perhaps not surprising that drug therapies, which can be provided by medical doctors, are dealt with separately from non-drug therapies, which are generally provided by chiropractors, physical therapists and non-medical health professionals. Chou and Hoffman write separate papers on drug and non-drug therapies, they are dealt with in separate recommendations (Recommendations 6 and 7), and there no direct comparison of safety, effectiveness or appropriateness. What can be said on the authority of the British Medical Research Council's widely respected Back Pain, Exercise and Manipulation trial (The BEAM Trial)[8] which is reviewed and acknowledged as being of high quality by Chou and Hoffman, is that manipulation and exercise - together or each alone – provide a cost-effective benefit over best medical care alone.

The likely interpretation of the Guideline by many US primary care physicians will be that many patients with disabling, acute, non-specific back pain should be recommended a short course of acetaminophen or NSAIDS and referred for a short course of skilled manipulation. On the basis of the US Official Disability Guidelines (ODG) this would be up to 18 visits over 6 to 8 weeks on the basis of objective improvement during the first 6 visits, and with the goal of facilitating return to normal function and activities. If the pain has persisted for more than 4 weeks, patients should be referred for manipulation and/or exercise and/or one of the other treatments recommended in the Guideline, with patient preference being a significant factor in the choice. This is in fact what is happening in the many US primary care clinics, spinal pain centers, and hospitals that

Chiropractic in Brazil – Appeal for Support

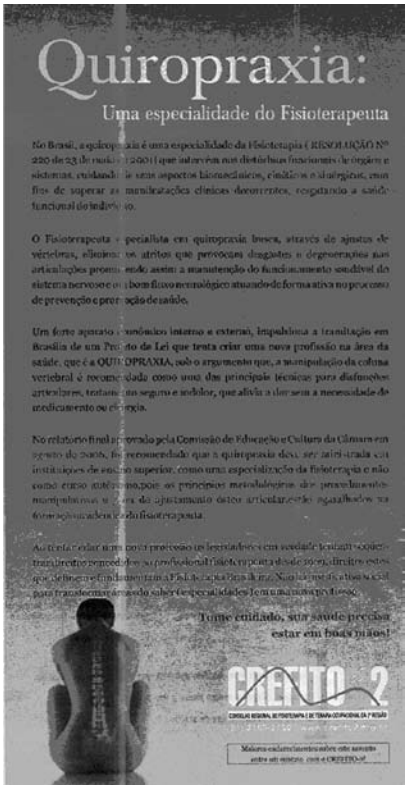
The World Federation of Chiropractic (WFC) and Brazilian Chiropractors' Association (ABQ) appeal for your support for the profession in Brazil in these exceptional circumstances:

• The ABQ, representing only 125 doctors of chiropractic, is promoting a draft Chiropractic Act that would recognize chiropractic as a distinct profession as elsewhere in the world – at present there is no law with respect to chiropractic practice in Brazil.

• In response the COFFITO, the regulatory body representing Brazil's 95,000 physiotherapists, is lobbing for law that would recognize chiropractic as a specialty of physiotherapy.

• The WFC has launched a campaign to support the ABQ and protect the profession in Brazil and internationally – if this battle is lost in Brazil it will be repeated elsewhere. This has raised almost US$100,000 towards a target fund of $150.000 through generous donations from individuals, associations and vendors

• The WFC appeals to you also – please donate now. For more information, a list of donors to date, and a donation form visit the Newsroom at www.wfc.org



Right: *PT advertisement in national papers in Brazil.*

have integrated chiropractic and medical care in recent years, including military and veteran's administration medical centres throughout the country.

b. Safety. One of the attractions of spinal manipulation, noted by Chou and Hoffman, is its safety. They note that serious events (e.g. worsening of lumbar disk herniation) are "very rare" and "less than 1 per 1 million patients visits," and that in 70 controlled clinical trials there has not been one serious complication.

c. Definition of Manipulation The Guideline gives the following definition of spinal manipulation in its glossary of terms:

"Manual therapy in which loads are applied to the spine by using short- or long-lever methods and high-velocity thrusts are applied to a spinal joint beyond its restricted range of movement. Spinal mobilization, or low-velocity passive movements within or at the limit of joint range, is often used in conjunction with spinal manipulation."

In other words spinal manipulation involves the high-velocity thrust that is central to chiropractic adjustment or manipulation, and does not include and is different from spinal mobilization and other manual therapies.

d. Frequency and Duration of Care. This Guideline contains no comment on frequency and duration of care for non-drug treatments.

F. Conclusion

For primary medical care in the US the ACP's journal *Annals of Internal Medicine* is the equivalent of the bible. This underlines the importance and future influence of this particular new Guideline on the appropriate management of back pain, which recommends expert special manipulation as a first line option for patients with either acute or chronic pain – and as the only non-drug first line option with proven benefit for acute pain. As mentioned, it is expressly said to apply to patients of all ages.

When someone who has had several episodes of low-back or neck pain over the years, but not constant pain and disability, has a flare-up, is that regarded as acute or chronic pain? The consensus of experts today is that a new disabling attack of spinal pain of under 4 weeks duration is properly regarded as acute pain. Such patients have an underlying spinal weakness and problem with recurrent acute episodes, which need to be resolved as quickly as possible to prevent true 'chronic' pain – constant disabling pain that persists beyond 3 months. On this basis the great majority of back or spinal pain patients – the standard estimate of researchers is over 90% – have acute, non-specific or mechanical back pain.

Historically patients have had to choose between different medical and chiropractic models and treatments for back pain. Frequently they have gone consecutively to one profession then to the other. They have received conflicting advice. Many medical and chiropractic doctors have only seen each others' failed and disappointed patients, creating negative bias on both sides. All that has been changing in recent years – and the new ACP/APS Guideline marks the point in time where it is clear that there is today one model of care and a clear basis for the integration of chiropractic and medical care for the world's many back pain patients. TCR

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