

Chapter Outline

- I. Overview
- II. List of Subtopics
- III. Literature
- IV. Recommendations
- V. Comments
- VI. References

I. OVERVIEW

This chapter provides a topical summary of typical chiropractic procedures in current use. Most chiropractic named technique procedures consist of a combination of various analytic and care components. This chapter does not serve to review and pass judgement on any particular named technique system as a whole. Indeed, the Board of Directors of the International Chiropractors Association has stated, as a matter of official ICA policy, that: "Doctors of chiropractic should be free to apply any chiropractic technique in which they are appropriately trained, to meet the needs of the patient." The choice of technique is an integral part of the discretion reserved to the judgement of the attending doctor.

Procedures are presented and ratings are made based on current available information and expert opinion. Clinical practice and scientific investigation are ongoing processes and it is understood that this document is a dynamic entity that will require modifications as new knowledge becomes available. There are three basic types of techniques, segmental, postural and tonal. Many of the techniques fall within more than one of these categories

Although this chapter does not include every possible chiropractic technique or procedure, an overall categorization of chiropractic approaches is presented. In addition, a more elaborate classification system is presented here for the non-manual chiropractic procedures.

II. LIST OF SUBTOPICS

- A. Use of ineffective or unsafe mode of care
- B. Chiropractic adjustment modes
 1. High velocity thrusts without recoil
 2. High velocity thrusts with recoil
 3. Low velocity thrusts without recoil
 4. Low velocity thrusts with recoil
 5. Sustained force
 6. Blocking techniques
 7. Manually assisted mechanical thrusts
 8. Mechanically assisted manual thrust
 9. Neurological reflex techniques
 10. Low velocity controlled vectored force
- C. Non-manual Procedures
 1. Exercise and Rehabilitation
 2. Education Procedures
 3. Electrical Modalities
 4. Thermal Modalities
 5. Ultrasound
 6. Bracing, Casts, and Supports
 7. Traction
 8. Nutritional Advice
 9. Lifestyle Recommendation
 10. Wellness Care/Prevention - Health Promotion/Spinal Hygiene

III. LITERATURE

The literature reveals that there are many articles on adjusting modes, largely written by

technical researchers and chiropractic college faculty. The majority of articles are, therefore, expository and educational and show a wide ranging interest in and discussion of the modes of care in chiropractic.

Specific literature on named chiropractic techniques has traditionally been proprietary and procedurally oriented. In addition, it has rarely been peer reviewed or indexed, which makes access difficult. This problem has been addressed in recent years by the chiropractic profession primarily through three vehicles.

Firstly, *the Journal of Chiropractic Technique* was established to provide a forum for articles relevant to chiropractic procedures. Secondly, a number of discussions, position papers and round tables have been sponsored by professional associations. The Consortium for Chiropractic Research, in collaboration with the Council on Technique and others, held a series of consensus conferences attended by technique teachers, academicians, chiropractic researchers, and private practitioners. See, for example, the proceedings of the 1990 Seattle Consensus Conference (Bergman 1990). Thirdly, a sophisticated standards of care project has been undertaken jointly by the RAND Corporation, the Consortium for Chiropractic Research, and the Foundation for Chiropractic Education and Research (Shekelle, et al., 1991a, Shekelle, et al., 1991b).

Kent and Vernon have developed perhaps the best summary of the matter of categorizing technique procedures as tonal, postural or segmental. In their text, *Case Studies in Chiropractic MRI*, they write:

Cooperstein described two broad approaches to chiropractic technique, the segmental approach and the postural approach. Murphy² added a third, the tonal approach. These conceptual models determine the nature of the analytical procedures employed, the type of adjustments applied, and the criteria for determining the success or failure of a given intervention. A summary of each follows:

1. The segmental model. *Subluxation is described in terms of alterations in specific intervertebral motion segments. In segmental approaches, the involved motion segments may be identified by radiographic procedures which assess intersegmental relationships, or by clinical examination procedures such as motion palpation. Examples of segmental approaches are the Gonstead and Diversified techniques.*

2. Postural approaches. *In postural approaches, subluxation is seen as a postural distortion. Practitioners of postural approaches evaluated "global" subluxations using postural analysis and radiographic techniques which evaluated spinal curves and their relationship to the spine as a whole. Examples of techniques emphasizing a postural approach are Pettibon Spinal Biomechanics and Applied Spinal Bio-engineering.*

3. Tonal approaches. *In 1910, D.D. Palmer wrote: Life is an expression of tone. Tone is the normal degree of nerve tension. Tone is expressed in function by normal elasticity, strength, and excitability...the cause of disease is any variation in tone. Tonal approaches tend to view the spine and nervous system as a functional unit. Tonal approaches emphasize the importance of functional outcomes, and acknowledge that clinical objectives may be achieved using a variety of adjusting methods. Examples of tonal approaches include Network Spinal Analysis and Torque-release Technique.*

In reviewing the preceding basic science and clinical models of the subluxation, it may be seen that the wide diversity of techniques in chiropractic may use different methods, but generally share the common objective of correcting spinal nerve interference caused by vertebral subluxation. Commonality and accountability may be achieved through the

development of models which emphasize clinical outcomes yet afford the practitioner flexibility in determining how those objectives are achieved. Such outcomes include, but are not limited to, evidence of functional integrity of the nervous system, and improvement in general health and quality of life indicators. Research resources should be directed toward the development of models and clinical strategies which result in more predictable and more efficient practice procedures.

IV. RECOMMENDATIONS

1. The chiropractor shall not use any mode of care which has been demonstrated by critical scientific study and field experience to be unsafe or ineffective in addressing vertebral subluxation and other malpositioned articulations and structures.

10.1.1 **Rating:** Established
Evidence: E, L

B. Chiropractic Adjustment Modes

The following recommendations refer to the application of techniques as employed in the correction of vertebral subluxation and other malpositioned articulations and structures.

1. High velocity thrusts without recoil

10.2.1 **Rating:** Established
Evidence: E, L

High velocity thrusts with recoil

10.2.2 **Rating:** Established
Evidence: E, L

3. Low velocity thrusts without recoil

10.2.3 **Rating:** Established
Evidence: E, L

4. Low velocity thrusts with recoil

10.2.4 **Rating:** Established
Evidence: E, L

5. Sustained force

10.2.5 **Rating:** Established
Evidence: E, L

6. Blocking techniques

10.2.6 **Rating:** Established
Evidence: E, L

7. Manually assisted mechanical thrust

10.2.7 **Rating:** Established
Evidence: E, L

8. Mechanically assisted manual thrust

10.2.8 **Rating:** Established
Evidence: E, L

9. Neurological reflex techniques

10.2.9 **Rating:** Established
Evidence: E, L

10. Low velocity controlled vectored force without recoil (see previous page)

10.2.10 **Rating:** Established
Evidence: E, L

C. Manual Reflex and Muscle Relaxation Procedures

1. **Muscle Energy Techniques:** A variety of procedures fall under this classification including post-facilitation stretch, post-isometric relaxation, and reciprocal inhibition, among others. In addition, there are several chiropractic techniques that use procedures mechanically and physiologically similar to these as part of their therapeutic armamentarium. The rationale for such procedures is based on the concept of reciprocal innervation and inhibition between agonist and antagonist muscles. Care is directed at finding such sites and having the patient do movements and muscle contractions, typically against some kind of active resistance in order to cause a relaxation of a hypertonic muscle. These techniques are commonly in use and are the subject of much investigation.

10.3.1 **Rating:** Established
Evidence: Class II, III

2. **Myofascial Ischemic Compression Procedures:** Ischemic compression involves placing a sustained compressive force on a tight or contracted muscle. This is thought to relax the muscle and thereby reduce stress to any joints to which the muscle is attached. The chiropractic profession has employed myofascial ischemic compression procedures and other soft tissue procedures as part of a care regimen for a long time (e.g., Receptor-tonus Technique, myofascial trigger point therapy).

10.3.2 **Rating:** Established
Evidence: Class II, III

3. **Miscellaneous Soft Tissue Techniques:** There are many different kinds of muscle work in widespread use. They involve applying manual pressure in order to relieve muscle spasm. Some common techniques of muscle work include: massage (superficial, effleurage, petrissage, percussion), pressure point work (accupressure and shiatsu),

and deep tissue techniques (Rolfing). There is little controversy regarding the clinical utility of such procedures for relaxation and uncomplicated musculoskeletal dysfunction. However, comparative clinical investigations are sparse. Light massage has occasionally been used as a placebo control in manipulation studies.

10.3.3 **Rating:** Established
Evidence: Class II, III

4. Non-Manual Procedures

a. Exercise and Rehabilitation

(1) **Mobility and Stretching Exercise:** Activity mobility maintenance and stretching by the patient are traditionally encouraged in chiropractic practice. Training, counseling and advice in stretching and mobility exercises are common, and various descriptions of chiropractic programs exist in the literature. Trials on exercise in chiropractic settings have not been published, but there is function and performance information available in exercise physiology and sports medicine literature.

10.4.1 **Rating:** Established
Evidence: Class I, II, III

(2) **Strengthening, Conditioning and Rehabilitation:** Active conditioning exercise is thought to be helpful for both healing and prevention of many mechanical back and neck problems. Conditioning and spinal stabilization programs are becoming more common for chiropractic management of low-back conditions. In addition, numerous programs are in place that involve job stimulation and work hardening protocols that are directed at chiropractic management and conditioning for specific tasks.

10.4.2 **Rating:** Established
Evidence: Class I, II, III

(3) **Passive Stretch:** Passive stretch is gentle sustained muscle lengthening applied by the practitioner or therapist. Its use is common within the chiropractic profession. Practitioners, especially within the field of sports chiropractic, teach and use these procedures frequently.

10.4.3 **Rating:** Established
Evidence: Class I, II, III

5. Educational Programs

1. **Back School/Spinal Hygiene Courses:** Knowledge about how to take care of one's health problems and how to modify behavior or lifestyle is likely to be beneficial for most patients. Back school programs and patient education have traditionally been an integral part of chiropractic case management. It is supportable when used as an appropriate teaching aid.

10.5.1 **Rating:** Established
Evidence: Class I, II, III

D. Prevention and Wellness Services

1. Wellness Care/Disease Prevention/Health Promotion: A relatively new area of interest in chiropractic as a distant service, prevention has long been a primary consideration of the chiropractic profession's approach to health care. Typical disease prevention programs, smoking cessation, weight reduction efforts and the like fit well within chiropractic practice scopes. Organizations such as the American Chiropractic Association, International Chiropractors' Association and the Chiropractic Forum of the American Public Health Association have adopted policies or expressed support for such programs and practitioners with a particular expertise and interest in this area are increasing in number.

10.5.2 **Rating:** Established
Evidence: Class II, III

2. Nutritional Counseling: Nutritional training is included in the chiropractic curriculum. As a general issue concerning scope of practice, there is little disagreement regarding the capability or qualifications of practitioners to counsel patients concerning nutritional matters.

10.5.3 **Rating:** Established
Evidence: Class I, II, III

Comment: Specific nutritional therapy is an extensive field that requires a great deal of delineation. This should be addressed in the future.

10.5.4 **Rating:** Established
Evidence: Class II, III

D. Ancillary Procedures

6. Electrical Modalities:
Electrical modalities have been a part of chiropractic education in some colleges and they are included in scope of practice regulations in many jurisdictions.

10.5.5 **Rating:** Established
Evidence: Class I, II, III

7. Thermal Modalities
These include cryotherapy, infrared, hydrotherapy, hydrocollator and others. These procedures are recognized within the chiropractic scope of practice in most jurisdictions. Protocols are documented and standardized.

10.5.6 **Rating:** Established
Evidence: Class I, II, III

8. Ultrasound
Ultrasound is a conservative procedure. It is included as a physiotherapeutic modality in some chiropractic statutes.

10.5.8 **Rating:** Established
Evidence: Class I, II, III

9. Bracing and Supports
Supports, braces, orthotics and the like may be useful components of chiropractic care.

10.5.9 **Rating:** Established
Evidence: Class I, II, III

10. Traction
Traction may be employed to stretch muscles, joints, and intervertebral discs. Its use is typically included in chiropractic education..

10.5.10 **Rating:** Established
Evidence: Class I, II, III

VI. COMMENTS

Chiropractic modes of care encompass a wide variety of approaches. As chiropractic addresses health care from a perspective involving the role that body structure plays in overall physiologic function, many procedures emphasize manual care procedures such as adjusting and soft tissue work. However, the profession has traditionally maintained a strong interest in wellness care and disease prevention, as well as lifestyle and ergonomic issues. Therefore education, conditioning, nutrition, counseling and other approaches are often used by many practitioners..

It should be emphasized that chiropractic practitioners are typically well trained in a variety of standard assessment procedures, as well as specialized neurological and structural evaluation protocols. There has traditionally been an emphasis in chiropractic practice on lifestyle, wellness, prevention, and other natural approaches to health care.

It is not the intent of this document to exclude any particular technique or procedure, but rather to provide general guidelines for the assessment of the safety and effectiveness of generic methodologies utilized by the chiropractic profession. As a living document, this chapter will be subject to periodic review as new and innovative methodologies are developed and submitted for evaluation.

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