

# CHIROPRACTIC NEUROLOGY RESEARCH BRIEF

A QUARTERLY NEWSLETTER FOR HEALTH CARE PROFESSIONALS BY MARK SARACINO, DC, DACAN

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## Introduction

Because of concerns about chiropractic training and the **contraindications of spinal manipulation**, medical physicians have been reluctant to refer patients to chiropractors. This issue will describe chiropractic, chiropractic neurology, therapies, and contraindications for spinal manipulation, growth of complimentary care and physicians' call for more information on the science of chiropractic. Ensuing issues of CRB will provide condition-specific studies from indexed journals. Of course, if you choose to not receive these issues, please contact me.

## What is Chiropractic?

Chiropractic is the art and science of spinal manipulation and the use of other natural methods to restore normal biomechanical joint motion, nerve function and blood circulation in the restoration of health. It is the most sought after holistic health care profession.

## What is Chiropractic Neurology?

Chiropractic Neurology is an exclusive sub-specialty within chiropractic. A rigorous three years of additional training and Board examination in the functions of the brain and nervous system (similar to those which a medical neurologist undergoes) better enable us to diagnose and treat many conditions such as head pain and tingling and numbness in the arms and legs.

The Chiropractic educational community recognized the need for expanding its specialized training and in 1979 initiated a three-year post-doctoral course in Clinical Neurology. Dr. Saracino was one of the first five Board Certified Chiropractic Neurologists in Pennsylvania and is a currently certified Diplomat of the American Chiropractic Academy of Neurology.

## Treatments Rendered

Chiropractic neurological treatments include: exercise rehabilitation (on premise), stretching, nutritional counseling, massage and physical therapy. The focus on muscles, ligaments and tendons to rebalance the nervous system allows for fewer spinal manipulations than those used by regular doctors of chiropractic.

## Educational Standards for Chiropractic

The federally regulated Council on Chiropractic Education establishes and enforces professional requirements. Additionally, national and state board examinations are required for licensing in each of the 50 states.

At the National University of the Health Sciences, Dr. Saracino's alma mater, prior to graduation each doctoral candidate must complete a four-year premedical curriculum and five years of professional studies, including internship. National was the first chiropractic educational institution to: be regionally and chiropractic specific accredited, require a four-year prerequisite, have a five-year term and the first of its kind to publish a scientifically-indexed journal, and have on-campus chiropractic hospital.

A recent study shows that chiropractic schools have more hours of classroom education than medical schools (4,800 vs. 4,667 hours) (3). Chiropractic students receive 200 more hours in anatomy and 60 more hours in physiology. Chiropractors also have approximately 1200 hours of patient contact prior to graduation. Similar to medical physicians, chiropractors are required to take a series of board examinations prior to licensure.

Doctors of chiropractic are highly-educated, qualified, and licensed to diagnose disease and refer patients to other physicians when the condition to be treated is out of their scope of practice.

#### **Contraindications of Manipulative Therapy- Cervical Spine**

The complications of cervical manipulation, mainly vascular accidents (stroke), are rare. The incidence of stroke following cervical manipulation has been reported in the literature as one to three incidents per million treatments (4). A more recent study found the incidence to be one in 5.85 million cervical manipulations (5). The current complication rate is much lower than previously thought. This may be due in part to the implementation of vascular screening procedures to assess patient risk, as well as the modification of manipulative techniques that employ less cervical rotation during the procedure.

#### **Contraindications of Manipulative Therapy- Lumbar Spine**

As to lumbar manipulation, the complication rate is less than that of cervical manipulation. Cauda equina syndrome, the most serious complication that could potentially result, has been estimated to be one in 100 million manipulations (6). According to the statistics in the medical literature, chiropractic manipulation is one of the safest treatment interventions in health care today.

There are over 40 randomized control trials that have shown the safety of chiropractic manipulation for back pain, and additional studies on the effectiveness of our therapy for other conditions like neck pain and headaches (7-9) and other conditions which will be shown in ensuing issues.

In the last two decades, much change has occurred in how chiropractic is viewed by medical physicians. Higher levels of trust have developed because the safety,

effectiveness, and patient satisfaction associated with chiropractic are well-established in the medical literature. A recent study in the *Annals of Internal Medicine* has shown that 65 percent of medical physicians currently refer patients to chiropractors. (10)

### **The Growth of Complimentary Care**

Complementary medicine has been defined as health care disciplines that work together and along with orthodox medicine (11). Chiropractic is the most sought after of these disciplines, yet many chiropractic and medical physicians believe the two models are incompatible (12). The *British Medical Journal*, however, has stated that the education of complementary practitioners, such as chiropractors, is grounded in orthodox medicine and that a common language exists allowing for close dialogue between practitioners (13). Unfortunately, inter-professional communication, knowledge of the various specialties, and referral patterns between these professions has often been found to be poor (14).

### **Medical Physicians' Request for Chiropractic Information**

Nevertheless, a recent study in Norway found that general medical practitioners desire better inter-professional communications (15). MDs commented on:

Frequency- 20% "often" refer to DCs, 63% infrequently refer, and 17% only refer at the request of the patient

Conditions- 97 % for low back pain, 59% for neck and/or shoulder pain, 56% for cervicogenic headache and 44% for tension headache

Communications- 93% were either currently communicating with or expressed an interest in communicating with a DC in the future, 67% had previously communicated with a DC and reported it being either positive or very positive experience

Knowledge of Chiropractic- 47% reported knowing something of the discipline, only 5% claimed to have a good knowledge of chiropractic and two thirds were interested in learning more about chiropractic.

This study demonstrates that communication between medical professions and chiropractors in Norway growing. This trend should continue in the U.S. A 1992 paper published in the *Journal of Family Practice* recommended guidelines for medical physicians wishing to refer patients to chiropractic physicians (16).

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