Dynamic Chiropractic

ORTHOTICS & ORTHOPEADICS

Good News! (For a Change): Chiropractic Management of Extremity Disorders

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How many people know that with the exception of the spine, D.D. Palmer appears to have adjusted foot joints more than any other joints of the body?[1] Palmer did not limit himself to the spine, and three of his first graduates, who wrote the first textbook on chiropractic, included a full chapter on foot adjusting.[2] There is clear evidence that the founder also adjusted the knee, hip, shoulder, wrist, hand and ribs.[1] Why bring this up? Because there is growing research on mobilization and manipulation in the treatment of common extremity disorders. Extremity disorders account for more work for chiropractors than has been commonly accepted in the past.

Physical therapists have begun to publish studies of mobilization (joint play or end feel mobilization) for the treatment of disorders such as acute inversion sprain,[3] knee osteoarthritis,[4] and patellofemoral pain syndrome (mobilization by exercise).[5,6] Chiropractors have also published similar trials for acute and chronic inversion sprain,[7,8] patellofemoral pain syndrome,[9,10] knee osteoarthritis,[11] metatarsalgia,[12] and lateral epicondylitis,[12] while research has been completed on plantar fasciitis, Achilles tendonitis, hip osteoarthritis, frozen shoulder, painful bunions, carpal tunnel syndrome, and many other extremity areas that await publication. Although these trials are only a beginning, and many could be stronger methodologically, they do amount to some of the first apparent evidence ever that extremity mobilization and manipulation may be helpful in treatment of the above disorders. When combined with simple soft tissue treatment and exercise programs, they may be a winning combination.[4,10]

Some chiropractors only treat the spine, but how much of the average chiropractor's work involves extremity disorders? Most will be surprised that in the United States, extremity disorders make up about 20% of the conditions treated by the average DC.

In a survey of 3,200 chiropractors in North America, it was shown that of the chief complaints of presenting patients, low back and pelvic pain and injury comprised 25.6% of complaints; neck pain and injury: 19.3%; headache or facial pain: 13.3%; and mid-back pain and injury: 11.8%. Spinal complaints therefore made up approximately 70% of the disorders treated by chiropractors.[14]

Surprisingly, extremity pain and injury accounted for up to 18% of the chief complaints of presenting patients - more than for mid-back pain and injury (11.8%), headache or facial pain (13.3%), and almost as much as neck pain and injury (19.3%)! Although some extremity pain may be referred or neuralgic, much of it is localized - such as inversion sprain of the ankle.[14]

With regard to the 18% of extremity pain and injuries seen in practice, 9.4% of these are of the lower extremity. In other words, lower extremity pain and/or injuries make up almost 10% of all disorders seen by chiropractors - almost as much as mid-back (thoracic) pain and injury at 11.8%, or headache or facial pain at 13.3%. In contrast, other nonmusculoskeletal conditions made up only

5.3%, chest pain and injury 3.7%, and abdominal pain and injury 2.9%.[14]

Although chiropractors list spinal adjustive technique as extremely important, they list extremity adjustive techniques as very important - more important than exercises or rehabilitative care, physiotherapy, nutrition, ergonomics, orthopaedic supports and taping procedures. Up to 96% of all chiropractors adjust the extremities. In fact, the only other adjustive technique utilized as much (96%) is diversified spinal adjusting.[14]

Some extremity disorders are significant in terms of the number of people affected. For example, patellofemoral pain syndrome may occur in up to 10% of all sports injuries, 25% of all running injuries and eventually (within a lifetime) up to 40% of the general population.[9,10] Almost 25% of running and jumping injuries are ankle sprains. In a nine-year follow-up of patients treated for inversion sprain, 59% continued to suffer pain and/or pain and dysfunction in the ankle.[7,8,15] Osteoarthritis of the knee occurs in 10-13% of the patient population 65 years and older, with associated direct and indirect costs of $65 billion in the U.S. alone.[11] This is a significant number of people who may be helped by chiropractic extremity care.

Why do people continue to suffer pain in some chronic ankle and knee disorders, despite standard medical treatment? Several studies point to the possibility that some of this pain may be due to undiagnosed and untreated joint dysfunction (or subluxation complex). [4,8] Several others that utilized manipulative therapy in the management of acute inversion sprain suggest that joint dysfunction, or the subluxation complex, if treated early, may decrease morbidity and speed healing.[3,7] Green, et al., applied joint play mobilization with the RICE regimen versus RICE alone. The experimental group required fewer treatments, achieved pain-free dorsiflexion faster and also had greater increases in stride speed compared to controls.[3,7]

Coetzer, et al., applied high-velocity, low-amplitude manipulations versus piroxicam (a nonsteroidal anti-inflammatory drug previously shown to be effective in acute inversion sprain versus placebo). [3,7] In this study, both groups received ice and crepe bandaging, and both treatments were equally effective in decreasing pain and increasing function (with manipulation increasing dorsiflexion faster than piroxicam).[3,7] These are the first studies to support the use of manipulative therapy in the treatment of acute inversion sprain. And yet, my personal experience is that chiropractors see more chronic, rather than acute, cases of inversion ankle pain. I believe the Pellow, et al., study[8] suggests that chiropractors can offer these patients particularly effective relief because we are fully trained in manipulative care, whereas the average physical therapist is not.

The question now is, are we going to live up to the vision of the founder? If we do not offer manipulative care of the extremities, who will? Of course, we all know the answer to this question - we can, for the first time in more than 100 years, feel some confidence that we offer patients real help, and possibly better help, than other practitioners. Will we step up to the plate?

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