

Rehabilitation: the New Paradigm

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Editor's Note: Dr. Liebenson is a 1986 Los Angeles College of Chiropractic graduate and an adjunct faculty member in the continuing education department at LACC. He was a consultant for the Mercy Center Guidelines, and is now editing Spinal Rehabilitation: A Manual of Active Care Procedures, scheduled for publication this year.

Introduction

Chiropractic is emerging as the cost effective front-line approach to management of neuromusculoskeletal disorders -- especially low back pain. Rehabilitation and active care are key aspects to the new quality care paradigm which is emerging. For chiropractors to be in step with this evolution they need to learn new evaluation and treatment skills along with a revised philosophy of care. Manipulation has been validated and now is considered the "gold standard" against which all other pain relieving therapies must be compared. But biobehavioral concepts of illness such as physical and psychological deconditioning have also been validated as key players in the emerging model of care. Future neuromusculoskeletal specialists will not only be experts in manipulation, but know how to transition from passive to active care, and evaluate the biobehavioral component of musculoskeletal illness.

An overemphasis on passive modalities beyond the early stages of acute care reflect the dichotomy between typical chiropractic practice and emerging rehabilitation standards. This paper presents expert, consensus opinion and scientific evidence which establishes the clear distinction between passive and active care. Improved results in our practices and accompanying cost savings in the health care system will be realized by the improved management afforded by the new rehabilitation paradigm.

CONSENSUS OPINION

Mercy Center Consensus Conference, 1993

1) Stages of Treatment/Care: Goals and Objectives (p 120)

A) Passive Care

1. Acute Intervention

B) Active Care

1. Remobilization

2. Rehabilitation

a) Restoring strength & endurance

b) increasing physical work capacity

3. Lifestyle Adaptations

2) "It is beneficial to proceed to rehabilitation phase as rapidly as possible, and to minimize dependency upon passive forms of treatment/care." (p 110)

3) "All episodes of symptoms that remain unchanged for 2-3 weeks should be evaluated for risk factors of pending chronicity. Patients at risk for becoming chronic should have treatment plans altered to de-emphasize passive care and refocus on active care approaches." (p 125)

Haldeman S, Chapman-Smith D, Petersen DM. Frequency and duration of care. In: Guidelines for Chiropractic Quality Assurance and Practice Parameters. Aspen 1993, Gaithersburg, MD.

British Clinical Standards Advisory Group Back Pain Guidelines, 1994

1. "At present, the main emphasis of physical therapy for back pain is on symptomatic relief of pain, despite evidence that many of the modalities used are ineffective. Symptomatic measures to control pain are required but this should be used to embark on active rehabilitation rather than be seen as an end in itself." (p38)
2. "We recommend: There should be a change of emphasis and redirection of resources from symptomatic treatment, to the provision of active rehabilitation and patient education." (p46)

Clinical Standards Advisory Group: Back Pain, London 1994, HMSO.

Agency for Health Care Policy & Research, 1994 (Quick Reference Guide for Clinicians)

1) "Physical modalities such as ... also have no proven efficacy in the treatment of acute low back symptoms." (p12)

Bigos S, Bowyer O, Braen G, et al. Acute Low Back Problems in Adults. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, 1994.

SCIENTIFIC EVIDENCE

1) Linton demonstrated that early aggressive treatment (patient education, exercise instruction, physical therapy) was superior to traditional treatment approaches (rest and analgesics without physical therapy for three months). "Properly administered early active intervention may therefore decrease sick leave and prevent chronic problems, thus saving considerable resources." This is a particularly powerful study in that the risk of developing chronic pain was eight times lower in the early active intervention group than in the traditional group.

Linton SJ, Hellsing AL, Andersson D. A controlled study of the effects of an early intervention on acute musculoskeletal pain problems. Pain, 1993;54:353-359.

2) Mitchell in a comparative study of passive physical therapy vs. rehabilitation found, "Active exercises to provide mobility, muscle strengthening, and work conditioning has shown superior results... substantial savings have been realized in the number of days absent from work and savings in the dollars expended for compensation benefits. There was an initial increase in health care costs resulting from the intensity of the treatment, but these costs were more than offset by savings in wage loss cost."

Mitchell RI, Carmen GM: Results of a multicenter trial using an intensive active exercise program for the treatment of acute soft tissue and back injuries. *Spine*, 1990;15:514-521.

3) Lindstrom et al., compared a group treated with exercises and patient education to a more traditionally treated control group and documented earlier return to work and decreased re-injury in the rehabilitation group.

Lindstrom A, Ohlund C, Eek C, et al: Activation of subacute low back patients. *Physical Therapy*, 1992;293.

4) The notion that active exercise can be harmful in a painful individual is incorrect. Guided exercise by a properly trained rehabilitation specialist is the optimal treatment program for the subacute population. A key is exercising to a pre-established quota rather than to a pain limit (Fordyce). Waddell stated, "There is no evidence that activity is harmful and, contrary to common belief, it does not necessarily even aggravate the pain."

Fordyce WE, Fowler RS, Lehmann JF, et al: Operant conditioning in the treatment of chronic pain. *Arch Phys Med Rehabil*, 1973;54:399-408.

Waddell G: A new clinical model for the treatment of low-back pain. *Spine*, 1987; 12:634-644.

5) Saal and Saal treated a group which had back and leg pain and were referred for surgery. They concluded: "All patients had undergone an aggressive physical rehabilitation program consisting of back school and stabilization exercise training... 92% return to work rate." Active rehabilitation is essential for all patients including those whom surgery is being considered for. Saal and Saal have said "failure of passive nonoperative treatment is not sufficient for the decision to operate."

Saal JA, Saal JS: Nonoperative treatment of herniated lumbar intervertebral disc with radiculopathy. *Spine*, 1989;14:431-437.

6) Timm in a randomized, controlled trial looking at exercise and passive care in failed back surgery patients found that low-tech exercises (Stabilization and McKenzie) gave a greater benefit than high-tech exercises (Cybex), physical modalities, or joint mobilization.

Timm KE. A randomized-control study of active and passive treatments for chronic low back pain following L5 laminectomy. *JOSPT*, 1994;20:276-286.

Conclusion

Rehabilitation is an exciting new way to practice. This paradigm allows us to evaluate regional conditions in light of dysfunction in the entire locomotor system. It is also a highly ethical way to practice because it reduces patient dependency on passive pain relieving approaches, while teaching patients the self-treatment techniques needed to develop control over their symptoms. By focusing on

functional restoration (instead of promotion of tissue healing) we can now achieve quicker and more lasting results with our adjustments, because we are addressing the underlying cause of most pain syndromes.

In future columns I will be joined by Dr. Jerry Hyman co-organizer of the LACC rehabilitation postgraduate courses. Future columns will cover such topics as: "Stabilization Exercises: The Low Cost Solution to Exercising Your Patients"; "Rehabilitation: The Missing Link in Managing Headaches"; and "Valid & Reliable Low-Tech Functional Capacity Tests." This column will cover the integration of rehabilitation concepts with chiropractic practice. How to measure outcomes, find the correlation between muscle and joint dysfunction, and view regional complaints from a broad perspective of locomotor system dysfunction will be detailed in future issues of "DC."

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