

Low Back Pain

TO MANIPULATE?

Complaints of low back pain are among the most common orthopaedic problems a clinician faces. Initially the importance of identifying the offending tissue and differentiation from “serious” pathology is obvious, but what next? Many treatment strategies have been proposed but have variable results. The problem has been successful categorization of back pain patients into meaningful subgroups.

During the last few years a group of researchers has attempted to isolate factors that would allow us confidently choose manipulation as a treatment technique.

Manipulation is defined as a high velocity, low amplitude thrust applied along or perpendicular to the plane of the joint, usually causing cavitation within that joint.

The **RULE**:

Both criteria must be present.

1. Duration of this episode: < 16 days
2. Extent of distal symptoms: Ø past knee

One manipulation was done at two separate visits during the first week. Subjects were considered to have a positive outcome if their disability score improved by 50% or more.



A subject with both criteria positive has a 92% chance of positive outcome with a spinal manipulation intervention.

OR NOT TO MANIPULATE?

Based on this study, we know now that a successful outcome from manipulation is **unlikely** for those that have only 1 or none of the two criteria, but we also must be aware of those that may have a detrimental outcome from manipulation of the lumbar spine.

Contraindications and Precautions with Manipulation:

Boney	Fracture Dislocation
Neurological	CNS Signs Spinal Cord Signs Cauda Equina Signs Multiple/Bilateral Root Signs
Inert Tissue	Collagen Disease Connective Tissue Hypermobility
Age Related	Children Elderly
Metabolic	Osteoporosis Paget's disease
Systemic	Diabetes Asthma (d/t medications) Endocrine Disorders Haemophilia Pregnancy
Inflammatory	Rheumatic conditions
Medications	Anticoagulants Corticosteroids Anti-estrogenics Osteoporosis Medications Glucocorticoids Methotrexate Cyclosporin A GRH Cholestyramine Thyroid Anticonvulsants Aluminum Antacids

References:

1. Fritz J, Childs J, Flynn T. Pragmatic application of a clinical prediction rule in primary care to identify patients with low back pain with a good prognosis following a brief spinal manipulation intervention. BMC Family Practice. 2005;6:29
2. The Orthopaedic Division of the Canadian Physiotherapy Association. Level IV, V course manual. 2007.