

KKMT Joint Mobilization: Scientific Reconciliation of the Principles and Techniques



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Abstract

Manual Therapy is a growing domain in Physical Therapy with several schools of thoughts. Krishna's Kinetikinetic Manual Therapy® (KKMT®) is one of the newest schools of thought in manual therapy developed in the 21st century. This article reconciles its principles and techniques with other researches.

Keywords: Manual therapy; Physical therapy; KKMT; Krishna's kinetikinetic manual therapy

Introduction

Krishna's Kinetikinetic Manual Therapy® (KKMT®) is the latest school of thought in manual therapy founded by Dr. Krishna N. Sharma, a Physiotherapist from India. KKMT® Joint Mobilization is a part of KKMT® as a whole [1].

Principles

The KKMT® joint mobilization techniques are based on the following principle [2]:

A. Proper arthrokinematic motion and homeostatic kinetic forces are essential for proper and smooth osteokinematic motion.

B. Homeostatic kinetics of the joint is important to maintain static and dynamic alignment of a joint.

C. Limitation or restrictions in the arthrokinematic motion can be restored by facilitating homeostatic kinetics of the intrinsic and extrinsic factors.

Guidelines for Therapists

Dr. Sharma gave the following guidelines to the therapists [3]:

A. Use biopsychosocial model for evaluation and treatment.

B. Structural asymmetry should not be an issue of special concern until it falls in the category of abnormal. Asymmetry is very normal in the human body.

C. Evaluate functional motions, wherever possible.

D. Don't use nocebic terminologies while discussing with patients/ family.

E. Avoid catastrophobia. Make sure that the patient understands the condition rather than being scared of.

Techniques and Application

The KKMT® Joint Mobilization is applied after muscle and joint conditioning. There are three techniques which are combined with passive movement, active movement, reciprocal inhibition, autogenic inhibition and resistance training [3]:

A. Joint gapping: In this technique, the therapist uses his fist as a fulcrum near the joint line and provides joint distraction by applying force on the distal end of the distal segment.

B. Movement/ Rolling facilitation: In this technique, the therapist counter-glides the joint to facilitate rolling.

C. 3D Gliding: In this technique, the therapist applies three dimensional glides for three dimensional functional motions.

Scientific Reconciliation of the components of KKMT®

a. Biopsychosocial Approach: The biopsychosocial approach has been found effective and is recommended by various researchers [4-6].

b. Counselling: The therapist briefs the patient about his/her condition and treatment in simplified layman terms without using medical jargons or terms. The therapist also educates the patient about the psychosocial model of pain and restriction. The effects of counselling on of changing patient's behaviour, perception of pain and catastrophobia desensitization are supported by various researchers [7-9].

c. Motion facilitation techniques: Thought there is not work done on using counter-glide to facilitate natural functional rolling, the other effects of exposure to movement like cortical reorganization, catastrophobia desensitization have been proved to be effective in pain [10-12].

d. 3D Glides: These complex passive glides are biomechanically designed to facilitate the natural glides during functional motions and provide pain free course of arthrokinematic motion. They may be applied while the joint is in resting position and can be followed by passive and active osteokinematic motion. The glides are found effective in increasing range of motion and decreasing pain [13,14].

e. Resistive motions: The patient is asked to do resistive training with the glides and facilitation to changes muscle memory using the neuroplasticity and helps the muscles relearn the amount and direction of homeostatic forces. The muscle memory and neuroplasticity are found effective in pain management [15-18].

f. Autogenic/ reciprocal inhibition: The 3D glides and facilitation patterns are combined with autogenic/ reciprocal inhibition too. The effectiveness of these inhibition techniques in gaining range of motion by relaxing the antagonists are proved by various researchers [19-21].

Conclusion

The principles and techniques of KKMT® joint mobilization techniques are found to be effective after scientifically reconciliation. We need more reconciliation and hence would conclude with the Latin *phrasenanos gigantum humeris insidentes* or as said by Isaac Newton in 1675: "If I have seen further it is by standing on the shoulders of Giants.

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