

How about a little love for non-thrust manipulation?

Chad Cook

Walsh University, North Canton, OH, USA

In case you may not have noticed, thrust manipulation has been on the positive side of many discussions as of late. If you don't mind me mimicking an analogy used by Feinstein and Horowitz¹ in their discussion of the passion for evidence-based medicine; manipulation has been accorded the same reverences as one's Mama, Freedom, and the Flag. I understand the motivation behind the passion for supporting this clinical technique. Thrust manipulation is a useful procedure²⁻⁴ that has been part of many turf discussions,^{5,6} and physical therapists have been instrumental in producing research to substantiate its use.⁷⁻¹⁰ As the late Peter Huijbregts, the former editor in chief of this journal once said,¹¹ to suggest the technique is owned by a single profession and attempt to limit its use is a waste of personal, professional, and societal resources. In my opinion, the arguing of the virtues of a thrust manipulation technique as 'better' than non-thrust manipulation (which is also known as mobilization), borders along the same line of waste of resources and is, quite frankly, preposterous.

Please don't misunderstand me, I'm not the type of clinician/researcher who bad-mouths something because I don't use it or I'm scared of it, because it goes against my philosophical approach, or because I have an agenda. I'm actually a colossal fan of thrust manipulation and have used it in the clinic for over 20 years on a comprehensive population. I've used thrust manipulation on the cervical, thoracic and lumbar spine. I've attempted to manipulate the sacroiliac joint (not sure I actually succeeded), and I've manipulated the shoulder, the elbow, the wrist, and the thumb. I've manipulated the hip, the knee (tibial-femoral joint), and the ankle. I've even manipulated the cuboid with good success. I've also taught thrust manipulation in hundreds of courses and in higher educational and continuing education settings for 12 years. Thrust manipulation is useful when used on the proper candidate and when combined with other beneficial treatment techniques and is well supported within the literature.²⁻⁴

So how about a little love for non-thrust manipulation?

The effectiveness of non-thrust manipulation is well studied^{12,13} and the context of the procedure has been previously reported.¹⁴⁻¹⁷ Techniques that were outlined in the studies often varied, but generally were associated with passive procedures that did not involve a thrust technique that were performed well within the anatomical range of the targeted segment. In short, the correct application of a non-thrust manipulation involves a complex process involving direct clinician and patient interactions.¹⁴ This has been described as a rigorous system of what amounts to data collection and processing.¹⁵ During the application of a technique, a clinician generally targets the comparable segment (most painful) and fine tunes their technique (using changes in force, rate, contact points, and direction) to the patient's tolerance, in an effort to reduce their report of pain, during the repeated or sustained movements. In some cases, mobilization techniques are designed to be pain free.¹⁸ In either case, whether pain is elicited or not, reassessment and further clinical reasoning is an essential element of the process. Non-thrust techniques are designed to reduce pain or increase range of motion; otherwise, the techniques are not considered appropriate for that patient.¹⁹

If one looks at comparative trials in which the design of the study is set up to reflect actual clinical practice, there is no difference in outcomes between thrust and non-thrust manipulation.²⁰ In other words, when non-thrust manipulation is performed similarly to how it is designed to be used in clinical practice, by those with skilled hands, it is as useful a technique as thrust manipulation.

It is important to recognize common misconceptions about non-thrust manipulation. Non-thrust manipulation is not 'press and guess', it is not 'jiggling the joint', nor does it involve blindly poking around until you find something that hurts. Along the same line, it is not *pumping* an indiscriminant spinous process without patient feedback, which has been used as a comparator technique in past trials and grants (that's a sham mobilization at best). Non-thrust manipulation is not manipulation for dummies

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or the default technique for clinicians with unskilled hands. Outside the speed associated with thrust manipulation, there is very little difference in evidence in what is termed as neurophysiological effects,^{21,22} long-term effects,^{23,24} or most likely, biomechanical effects between the two procedures.

What strikes me the most is that I've heard a number of newer clinicians, and others, confidently suggest that thrust manipulation is better than non-thrust manipulation. Further, the emphasis placed on the technique as the reason for success during clinical practice is surprising and discouraging. Thrust and non-thrust both seem to function best when combined in a multimodal treatment program as a conjunctive form of care. At present, data does not support the *opinion* that thrust is better than non-thrust or as a treatment technique that functions as a stand-alone procedure. If you ask most clinicians who truly use both thrust and non-thrust during clinical practice (who don't demonstrate a personal bias toward one or the other), they'll advocate that the two are markedly similar in terms of patient outcome.

So let's be honest, neither is better. They are both better.

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