Assessing the Validity of Muscle Response Testing (MRT) : A series of diagnostic test accuracy studies

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Introduction

Practitioners have used manual muscle testing (MMT) to assess neuromusculoskeletal integrity since early last century [1]. Since that time, other applications of MMT, including muscle response testing (MRT), were developed to assess conditions other than musculoskeletal, such as Muscle Response Testing (MRT). MRT, also known as kinesiology-style manual muscle testing (kMMT), is an assessment tool used by an estimated 1 million healthcare practitioners worldwide (both conventional and alternative). This paper describes two studies in a series of diagnostic test accuracy studies aimed at developing evidence for one application of MRT: distinguishing true from false spoken statements via MRT.

Methods

MRT practitioners and MRT-naïve test patients (TPs) were recruited. TPs were shown pictures (via computer) and instructed (via headset) to make simple true or false statements about the pictures they viewed, after which the muscle test was performed. The reference standard was the statements’ actual verity and the index test was MRT. In Study 1 (n=48 practitioner-TP pairs), each practitioner performed 40 MRTs and 40 intuitive guesses (“guesses”) without MRT. Study 2 (n=20 pairs) replicated Study 1.

Results

In Study 1, MRT practitioners correctly distinguished truth from falsehood in 69.3% (95% confidence interval 66.0-72.5%) of statements more often than by chance alone (\(p<0.01\)), and in Study 2, 63.1% (95% confidence interval 56.8-64.9%; \(p=0.01\)). No participant characteristics were identified which influenced accuracy.

Discussion

Significant differences were found between accuracy in identifying verity of spoken statements using MRT compared to chance. The main limitation of these studies is its lack of generalizability to other applications of MRT.

Conclusion

MRT when performed by a practitioner can distinguish true from false statements significantly more often than would be expected by guessing or by chance alone.
Presenter Biography

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Dr Anne Jensen has a PhD in clinical research from the University of Oxford in the United Kingdom. The focus of her research was on the accuracy of kinesiology-style manual muscle testing (kMMT) to detect lies, and her results confirm the validity of kMMT used for this purpose. Her background is in chiropractic, psychology and sports performance, and she has many peer-reviewed publications in these fields.

In addition, Dr Jensen is the developer of a mindbody healing technique called HeartSpeak, which she teaches worldwide. She is also a healer and maintains a private practice consulting in emotional wellness and stress reduction. Additionally, she works as a private research consultant helping complementary & alternative healthcare practitioners design and implement their own research studies.