

Clinical Prediction Rules: Time to Sacrifice the Holy Cow of Specificity?

It was with interest that I read the recently published editorial in this journal challenging the “sacred cow” of passive intervertebral joint motion evaluation (PIVM, PAVM)¹⁻³ as the cornerstone of orthopaedic manual therapy (OMT) clinical reasoning. Just as with the domesticated bovine species, the sanctified milk of sacred cows can taste wonderful when fresh but it may become less palatable when let out of the fridge too long.

As a new graduate of an IFOMT-recognized post-graduate OMT program, it was my perception that I could identify specific inter-segmental spinal motion impairments and precisely restore normal segmental function to that one inter-vertebral level through OMT techniques. With the passage of 27 years of an OMT-based Physiotherapy practice, ongoing professional development, and the gradual personal evolution from an authority-based to an evidence-based, clinical reasoning approach, the milk in my OMT glass seems to smell a bit funky.

The clinical prediction rules of researchers such as Childs, Flynn, Cleland, and Fritz et al⁴⁻⁷ do not reduce clinicians to mere technicians following a recipe format of treatment. These prediction rules are not rules of clinical conduct that must be followed blindly. Instead, they allow us to predict with reasonable certainty that a given clinical intervention will affect a positive outcome on the patients fulfilling criteria identified in these rules.

One danger these “rules” bring is when they fall into the hands of technocrats and are subsequently interpreted as what must be done rather than what might be done. In 1987 the Quebec Task Force (QTF) on Whiplash Associated Disorders (WAD)⁸ developed the WAD classification system solely for the purpose of guiding future research in the field. In many regions, this classification system has now become accepted as the primary predictor of recovery following motor vehicle collision by many payers of services with little to no regard of the individual client’s specific injuries or the original intent of the QTF panel⁹. We must not allow the use of the word “rules” to take on such a literal translation by external parties, particularly the payers of our services and our own regulatory bodies.

I personally applaud the above-mentioned researchers⁴⁻⁷ for their willingness to show us that the OMT emperor of passive intervertebral joint motion evaluation in fact has no --or disappointingly few-- clothes. The concept that the patient may be anaesthetized while we, the all knowing--all palpating clinicians, assess the biomechanical pathology and select the appropriate OMT procedure based on an evaluation procedure that has repeatedly been demonstrated to have unacceptable reliability¹⁰ and then re-evaluate the outcomes using the same unreliable assessment tools must be openly questioned. Analysis by way of PIVM and PAVM techniques forms an integral part of my regular patient analysis with the clear knowledge that, when used in isolation, they are, at least in my hands, reliably unreliable.

The use of clinical prediction rules assist us in pre-selecting those candidates best suited to respond positively to OMT procedures. In my opinion, a multi-modal battery of assessment tools including motion palpation procedures may then guide the therapist to at least a sub-region and perhaps to one target spinal segment that would benefit from our care. This comprehensive assessment approach has been suggested to be the most efficacious approach at least with regard to the clinical diagnosis of sacroiliac joint pathology¹¹.

I doubt that few current practitioners of OMT will wish to return to the days of performing only gross regional manipulations under heavy traction with little to no regard for segmental localization¹². Within the field of OMT, new procedures and clinical reasoning concepts are rapidly evolving including Mulligan’s synthesis of being guided by at least semi-specific therapist-applied segmental OMT procedures concurrent with the patient’s symptomatic responses^{14,15}. Although capable of demonstrating high levels of positive clinical treatment outcomes^{16,17} and meeting reasonable criteria of face validity¹⁸, these recent developments are, as yet, awaiting investigation into their reliability as evaluative tools.

It would seem that manual medicine practitioners are not just yet faced with the unpleasant task of taking “old Betsy” the sacred segmental specificity cow to the stockyards just because some her milk is a bit off. As Dr. Huijbregts, I will continue to pour myself a nice long glass of motion palpation milk on a regular basis but I will also take a good sniff before I drink.

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