In 1889, Mark Twain described a rather resourceful character in A Connecticut Yankee in King Arthur’s Court by writing that “She was wise, subtle, and knew more than one way to skin a cat”; that is, she had in her toolbox more than one way to get what she wanted. The exact origins of the phrase are unclear, but most of us interpret this expression as meaning that there are certain tasks that can be accomplished in a variety of ways. Of course, proverbs should not be mistaken for science; however, sometimes they display a certain reality that crosses many domains of knowledge.

For example, decision making related to manual therapy interventions has often been based on theoretical biomechanical constructs. Most approaches advocate that the physical therapist accurately identify a segmental dysfunction based on intersegmental motion or alignment. Presumably this assessment results in the identification of a very specific impairment that requires the application of a particular manual therapy procedure. The actual technique selection is frequently based on the school of thought most familiar to the practitioner, typically learned during first-professional education or a continuing education program. The necessity of choosing a particular technique is often reinforced by well-intended manual physical therapy educators who emphasize the idea that failure to choose the “right” technique (eg, spinal level, intervention direction, patient position, thrust/nonthrust technique) is not only wrong but may interfere with recovery and be potentially injurious to the patient.

Paradoxically, at the same time that evidence supporting the effectiveness of manual physical therapy interventions is mounting, the premise on which much of the precise decision making for choosing individual techniques is based is being challenged. For example, recent in vivo dynamic MRI studies have investigated spinal kinematics during posteroanterior (PA) mobilization in both the lumbar and cervical spine. Kulig et al demonstrated that when a PA grade IV force was directed at any segment in the lumbar spine, rotation in the sagittal plane occurs at all lumbar vertebrae. Similarly Lee and colleagues reported that grade III mobilization directed at the C5 spinous process was not specific to the targeted segment; in fact, the greatest amount of rotation in the sagittal plane occurred at the 2 to 3 segments above and below the target vertebra.

Recent studies have also investigated the accuracy and precision of spinal manipulation techniques, as determined by the location of cavitations (popping sound). Beffa and Mathews found no correlation between a technique directed at L5 and one directed at the sacroiliac joint. In fact, each of the techniques resulted in cavitations throughout the lumbosacral region. Ross et al reported that manipulation directed at the thoracic spine was accurate only 53% of the time, while lumbar spine manipulation was accurate only 46% of the time. However, the most important consideration in terms of selecting a particular manual therapy technique should be the influence of the technique on patient-centered outcomes. Previously we have reported that the presence or absence of an audible popping sound
during thrust manipulation is not related to outcomes in patients with low back complaints. Additionally, Hass and colleagues reported on the response of patients with neck pain who received thrust manipulation to either a randomly assigned level or a level selected based on end-play assessment. The authors noted that both groups achieved equally significant reduction in neck pain and stiffness, with no apparent advantage in attempting to target the intervention to specifically identified “impaired” segments.

In the current issue, Cleland and colleagues provide further insight on the subject of specific technique selection. The authors report on a series of patients with low back pain who met criteria suggesting that they would respond favorably to a particular thrust manipulation technique. But instead of using the technique that had previously been shown to be effective, the authors chose to perform an alternative technique that was potentially different in terms of the spinal region treated and the expected patient response. The results of their case series indicate that perhaps the particular technique selected is not nearly as important as determining the appropriate subgroup of patients in which spinal thrust manipulation is most likely to be beneficial.

Taken in context, these results do not reduce the need for continued emphasis on developing expert patient-handling skills in manual physical therapy practice. However, the development of these skills should not be hindered by complex, unproven algorithms. Rather, an increased emphasis should be placed on evidence-based decision making and the development of hands-on skills that can be performed proficiently, and yet are easily modifiable when individual physical therapist or patient characteristics dictate. So maybe there is some wisdom in Mark Twain’s character. When it comes to manual physical therapy interventions, in particular thrust manipulation techniques, it appears that there really is more than one way to manipulate a spine. So, I reiterate a previous call: “Just move it, and move on.”

REFERENCES