

## Decompression: Conception and Misconception

Jay Kennedy, DC

It's been nearly 20 years since the initial entrance into the chiropractic market of a mechanical traction device marketed as a "spinal/disc decompression" system. I estimate that at least 12 systems, beginning with the VAX-D in 1993, have been presented to our profession. Most ride the coattails of the VAX-D and its contemporaneous competitor, the DRS, first introduced in 1996. I've owned both systems (and at least six others) and have treated several thousand patients beginning in 1994 in two multispecialty clinics. I describe the experience overall as one of distinct benefit (regardless of the overall financial pain and consternation \$5,500 a month in lease payments can create).

I am very glad to have cut my teeth, so to speak on the most notable of the decompression *magic machines*. The experience has led me to the opinions I now hold and disseminate: Traction works and traction has a valuable place in chiropractic practice, but *buyer beware*: there may be more gravy than grave to the ghost of decompression past.

Interestingly, both of the early decompression systems were marketed by the same "team of experts" using very similar unique selling propositions (USPs) and compelling jargon. Clearly the marketers (whether done to confuse, obfuscate or with genuine belief) developed the notion that "decompression" is machine dependent - an attribute of a patented, very costly "emerging technology" and not to be confused with, or diminished by suggesting it is the same therapy as "pelvic traction."

To disprove this nonsense, we need only point out the simple fact that every single one of these devices are regulated by the U.S. FDA under regulation 890.5900 as "powered traction tables," and all are listed as substantially equivalent to predicate devices that are simply linear traction devices. Just because a manufacturer puts the word *decompression* somewhere in their name or in the filing of their FDA clearance doesn't mean the FDA has ever changed its mind about the labeling of a traction table. If it had, there would have been a new regulation defining a powered decompression device, something the FDA has steadfastly declined to do.

No matter, even many of the less hyperbolic manufacturers and their sales forces still implicitly suggest their systems are FDA-cleared decompression systems, not necessarily a traction table. You see it in the loaded and well-staged language that has been used for a decade: *emerging technology, disc decompression technology, targeted decompression, time/force logarithm, 86 percent success rates, proven non-surgical solution*. These phrases have been the endemic and persistent tour de force for decompression marketing, with a few new faces - and phrases - born each year. To those of us with years of immersion into decompression/traction therapy and its history, the "new" systems arriving with the same blunderbuss makes us want to say enough is enough; you can't get away with this any longer.

"Targeting" a particular disc, for instance, is a particularly egregious aspect of decompression marketing ... especially if *angulation* of the pull is how you intend to accomplish it. If you increase the angle of either the pull or the patient, you by necessity increase the flexion and thus the "traction" exerted at the L5/S1 disc. It cannot be diminished at that level and increased at the

levels above. It is biomechanical farce and pure nonsense; and of course, something amenable to any traction table with a motor, a rope and a harness.

What has always been most fascinating to me is that the early decompression systems had several utilitarian aspects to their patient positioning, restraint, protocols etc., yet the manufacturers' dogged contention was, and continues to be, the "magical"(and patented) time/force logarithm of pull and the nonsense that this overcomes "muscle guarding." Even a cursory reading of Bogduk (*Biomechanics of Back Pain*) will dispel this notion.

This (not the other attributes amenable to *any* traction system) is given as the reason discal decompression occurs. Forget that decompression always occurs when you traction an intact disc, no matter with a Warn winch, a come-along or a more sophisticated traction motor. Granted, *caveat emptor* should have been one of the commandments, and we are all adults here, able to make informed choices; but when advertising jargon transforms itself into science, poor-quality studies meant to exaggerate the benefits of a new product are perpetuated as proof of "emerging technology" and parsimonious methods are "validated" by well-credentialed clinicians (shills?), even skeptical inquirers can be pulled in.

Those who are most objective and may offer the best insights are almost always underfunded and far less strident in the media. Science and reason tend not to pay well. And as Dun and Bradstreet so aptly pointed out: "Nothing happens until a sale is made." Scientists typically make poor salesmen.

As to the future of decompression, I have no doubt hyperbole and magic will tend to persist but will slowly be sequestered behind an avalanche of mainstream indictment of those methods. The majority will speak with their wallets and the proponents most affordable, reasonable, central and aligned with science will predominate.

Traction is and has always been a supremely reasonable and intuitive therapy to apply to a patient in pain from compression (disc/facet). In fact, a recent survey by A.A. Harte suggests at least 50 percent of PTs utilize it, and most believe it to be valuable. Fritz, Dellito and many others over the last decade have proposed that musculoskeletal conditions tend to be responsive to one of four interventions: manipulation, directional preference, stabilization/exercise and/or traction.

In 1955, the *Journal of Rheumatology* published a study on lumbar traction and the specifics of the harnessing. Cyriax, Mathews and others were early and resolute proponents of traction for disc-related problems. Traction tables with axilla posts, dual-harness systems, handlebars and pelvic sections affording flexion/extension/lateral and rotational traction have been in service since the mid 1950s. Of course, just as the 50-year-old patient who has never had any contact with chiropractic is gullible as to what to expect, the chiropractor with no contact or prior knowledge about traction becomes susceptible to a well-orchestrated obfuscation and misdirected advertising campaign. The key is due diligence and some good old-fashioned common sense.

JANUARY 2011