

Decompression: Basic Classification Overview

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It is apparent by the myriad studies over the past decade that "diagnosing" back pain is probably not possible in the vast majority of cases. According to the work of Deyo and others, at least 70 percent of pain is generated from sprained tissues and overall 90 percent of LBP is at present idiopathic. Grieves suggested in his book *Mobilization of the Spine* (1986) that the term *prediction* is probably more accurate than *diagnosis* when it comes to back pain.

The generally accepted definition of a sprain is damage to a ligament structure (perhaps including [the disc's annulus](#), which Bogduk and others have proposed is liable to sprain). A strain, on the other hand, is damage to a muscle or its tendon structure (which Bogduk suggests are rarely the source of chronic LBP). Now the rub in all of this is the implausibility (and impracticality) of actually determining which is which. The International Association of Spinal Pain has set forth specific criteria for determining the source of pain. Valid and reliable tests are necessary for any diagnostic accuracy; this is true of cancer, diabetes or back pain. The problem is that there are at present no demonstrably valid or reliable tests that conclusively prove or allow us to reach diagnostic prevalence for most back pain.

Fortunately, in our world of private practice, patients are not holding us to this standard (yet). We can deduce with some level of certainty that in fact we are dealing with sprained / strained tissues. When we add segmental dysfunctions, trigger points, spasm and a whole host of other things (that probably also fail the "valid and reliable" thesis), it appears to give us sufficient indications as to what is wrong and how to help it. It appears that suggesting [sprain / strain](#) is a *default* diagnosis (prediction) based more on the fact nothing "worse" appears to be the case.

In our method of decompression classification we recognize 70 percent of back pain may potentially be sprained tissues. However, with the availability of decompression (and the marketing typically used with it), we may get several patients a month with a less nebulous (and potentially more mechanically amenable) diagnostic profile - i.e., disc herniation, prolapse and nerve compression. Many have diagnostic cues that are somewhat more valid, such as nerve tension signs, compression signs, pain referral patterns and MRI findings of prolapse and focal herniation. I believe these findings allow us a more direct and accurate treatment algorithm.

We look for positive compression tests such as Millgram's, slump, first 1/3rd ROM pain / impairment and the peripheralization of symptoms. We use Valsalva, Lindner's, force / form closure and other overt compression tests, scrutinizing findings such as relief posturing, antalgia and directional preference. These signs and symptoms, when viewed with the patient history, help us predict a compression disc syndrome versus a sprain with fair to good accuracy.

Disc pain can come in many varieties, both amenable to [decompression traction](#) and irritated from it, such as a recent sprain or certain types of annular tears. Decompression can burden some conditions while relieving others. Observational clarity and a keen awareness of these variables are necessities for the best outcomes with the least adverse effects. (This is precisely why I hound on the lie of the *magic* decompression system. We drop our guard in regards to proper patient classification when we believe we're dealing with a table that does our thinking for us.)

We tend to find nuclear extrusions responding better than annular tears / sprains. Internal disc disruption and severe desiccation likely diminish or eliminate the benefit of decompression at those levels. The breakdown of the nucleus creates loss of hydrostatic pressure and thus the disc is no longer sustaining an internal positive pressure.

The annulus can't technically be "decompressed." In these cases, of course, nonsurgical decompression therapy becomes relatively ineffectual. This is not to suggest traction (stretch) of the spinal structures couldn't afford some temporary subjective effects (pain gate, reduction of local paraspinal hypertonicity and placebo effect), but direct decompression of that disc would be unlikely.

When decompressive positions afford relief, it is an obvious suggestion that decompression as a therapy may well perpetuate the benefits. As Cyriax pointed out some 50 years ago, traction is expedited bed rest ... without the disuse side effects. If recumbence fosters pain relief, traction may promulgate and expand the effect. It remains an intuitive and sensible approach in cases of disc compression, and the enthusiasm seen in both the doctors who use it and the general public seems to reinforce that.

Our research suggests practices marketing "decompression therapy" tend to attract a slightly different cross-section of patients than those entering a chiropractic adjustment-only practice. Good, bad or otherwise, many surveys suggest the limited percentage of the population we treat may be partially based on fear and misunderstanding of what we do. Like it or not, many patients with herniations who may be unlikely to try "regular chiropractic" may be likely to try decompression therapy offered by a chiropractor. (This same paradigm is seen in many instrument-adjusting practices as well.) And this gives us the opportunity to introduce chiropractic where we may have been unable to previously.

The next article in this series will be a discussion of prone versus supine and the various patient positions needed to address the three basic disc classification types.

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