

CENTRALIZATION OF SPINAL PAIN.

Term *centralization* refers to a phenomenon in which a referred pain into extremity retreats to the spinal area. This is in contrast to *peripheralization* when such pain travels farther down and intensifies in the extremity.

Centralization is a common finding in patients with spinal pain accompanied by referred or radicular symptoms. Literature supports using centralization as a good outcome predictor (pain reduction and return to activities of daily living or work.)

In their article Berthelot et al concluded that centralization may be indicative of discogenic pain and is correlated with better outcomes (Berthelot JM, Delecrin J, Maugars Y, Passuti N; *Contribution of centralization phenomenon to the diagnosis, prognosis, and treatment of discogenic low back pain.* Joint Bone Spine; 74: 319-323,2007). In their study Skytte, May and Petersen showed that the patients classified as centralizers had better outcomes for pain and disability than noncentralizers. The patients who could not centralize their pain were also six times more likely to undergo surgery (Skytte L, May S, Petersen P; *Centralization: Its prognostic value in patients with referred symptoms and sciatica.* Spine; 30: E293-E299, 2005.) Also Long demonstrated a superior outcome in chronic low back pain patients who centralized versus those who did not while undergoing work hardening (Long, A; *The centralization phenomenon: its usefulness as a predictor of outcome in conservative treatment of chronic low back pain [a pilot study* Spine; 20(23): 2513-2521, 1995.

Since centralization is a pivotal concept within the paradigm of McKenzie method, we at Strulowitz and Gargiulo use it as a first line of defense against the off-center spinal and referred pain. Examining whether the patient demonstrates the ability to centralize will determine directional preference of subsequent exercise. Directional preference is discussed in the next article.