

DEVELOPING A GRADING SYSTEM FOR Z JOINT DEGENERATION USING MRI SCANS

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One of the predisposing factors of Z joint pain is the degeneration of these Z joints. Because Z joints are “pain generators,” developing a deeper understanding of the effects of spinal adjusting on Z joints in various stages of degeneration is important. The objective of this study is to develop a global, in vivo, grading system for assessing degeneration of the L4/L5 zygapophysial (Z) joints from MRI scans, combining methods previously published on MRI and computerized tomography (CT) by other authors and the results of work completed in our lab grading degeneration from x-rays. L4/L5 degeneration will be correlated with L4/L5 Z joint gapping (as determined in the Z joint study currently in progress) in subjects that: 1) undergo side posture positioning alone, 2) undergo spinal adjusting followed by side posture positioning, and 3) are in a control group scanned in the neutral position. Potential consequences of this line of investigation (following verification with clinical studies) could be the recommendation of one type of treatment (e.g., side posture adjusting) for joints with minimal to moderate degeneration and another type of treatment (e.g., traction) for joints with more severe degeneration.

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