

Unsuspected Disc Herniation on Extension



Upright-Neutral



Upright-Extension

Clinical Case Overview

A 62-year old woman with chronic neck pain of 30 years duration that radiated into her shoulders sought upright, weight-bearing flexion-extension MRI to reveal the origin of her pain. Her neutral-sitting examination showed a C5-6 herniation, but upon extension an additional herniation appeared at C4-5.

Surgical cervical disk repair invariably includes fusion of the involved cervical level. Cervical herniation is frequently associated with spinal instability at the involved level.

Any surgeon, unaware of the herniation and potential instability at C4-5, would fuse C5-6, not knowing that a fusion of C5-6 might provoke added instability at C4-5 and more cervical symptoms. The result would be an unsuccessful surgical outcome with no explanation for the unsatisfactory result, since traditional recumbent-only MRI without extension would not have visualized the existence of the herniation at C4-5.