

Letter Regarding “Traumatic Nondissociative Carpal Instability: A Case Series”



We congratulate Loisel et al¹ on their excellent article entitled “Traumatic Nondissociative Carpal Instability: A Case Series.” We applaud their precise description of the surgical pathology and their aggressive repair of the disrupted ligaments. However, we take issue with the term “nondissociative” for categorizing these injuries.

In 1981, the senior of us (D.M.L.) reported the first series of patients with what we later termed palmar midcarpal instability.² Later that decade, researchers from the Mayo Clinic introduced the term carpal instability nondissociative to distinguish this entity from the proximal row “dissociative” lesions where the interosseous ligaments were disrupted.³

At the time, we objected to the term carpal instability nondissociative, because no one could verify the pathology was truly nondissociative. As it turns out, the pathology in many instances is indeed dissociative, with disrupted ligaments causing a lack of synchronous action between adjacent carpals or rows. Even in the cases presented here, the authors describe the etiology as acute disruptions of dorsal and/or volar ligaments.

Therefore, we continue to favor the term midcarpal instability. The pathomechanics of this instability are hypermobility of the proximal row because of ligament laxity, whether congenitally lax or disrupted by trauma. The result is a sagittal plane subluxation of the capitate on the lunate at the midcarpal joint, creating the classic, painful catch-up-clunk. This subluxation is usually palmar, but either way it leads to a dissociation of normal motion between the 2 carpal rows.⁴

What we propose is that the term midcarpal instability be subclassified into traumatic (as in this series) and nontraumatic (as occurs with lax ligaments) categories. These, in turn, can be subdivided into intrinsic (as in wrist ligament injury) or extrinsic (as in distal radius malunion) categories.⁵ We believe that this terminology would be consistent with popular usage and more consistent with the true pathology as noted during surgery.

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