

## Excerpt from:

## Clinical Neurology of the SacroCoccygeal Syndrome

By Dr. Chris Kemper

### Summary

The complexity of the human nervous system makes most relevant discussions, let alone hypothetical explanations, feel incomplete. This fractional review of coccyx dysfunction-induced spinal cord tension and a resultant pathological syndrome, is no exception. Yet, I trust that any attempt to help reduce human suffering, while improving individual performance, is laudable.



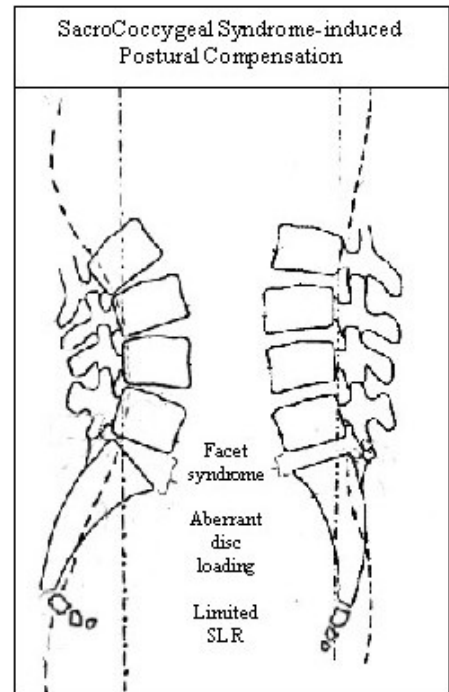
Could the SacroCoccygeal Syndrome be triggered by a particularly strong Golgi Tendon Response<sup>1</sup>? Or perhaps it is the result of a super potentiated combination-affect of central reticular excitation potentiated by a caudally tensioned dura? What we do know is that, whatever the cause, a powerful response, not of classic neuralgic or dermatomal presentation, has been consistently observed and measured in thousands of cases.

Regardless of how neurophysiologists ultimately explain the S/C syndrome's affect, I am confident that a closer look at the coccyx is necessary and inevitable. This would be particularly true on behalf of those patients who report exacting accounts of pelvic trauma followed by chronic loss of spine

flexibility and strength as well as otherwise unexplainable pain.

In any event, as more and more spine physicians test for, identify and treat the condition, its neuromechanical profile will become increasingly understood.

For now, it is my hope that more pain managers will evaluate this unusual vertebra, diagnose its unique symptomatology when present, and offer the treatment protocol we have found to be effective, relatively long lasting and safe.



### Overview and Introduction

The primary purpose of this manual is the diagnosis and clinical management of coccyx-induced dural tension. The condition most commonly occurs as the result of pelvic floor trauma that impairs coccygeal range of motion.

Coccygeal trauma can occur from events as benign as sitting too much to forceful blows associated with motor vehicle accidents. The condition we pursue is grave enough to cause disabling pain, disc failure and neuropathy, but benign enough to be reduced or eliminated with a specific intervention. With respect to the precise neurohistological or neurodynamic mechanisms whereby the coccyx can impair nerve impulse transmission, we defer to Alf Breig, M.D. Dr. Breig's text, "Adverse Mechanical Tension of the Central Nervous System<sup>2</sup>", provides a foundational underpinning upon which our SacroCoccygeal (S/C) syndrome hypothesis<sup>3</sup> and clinical procedures are largely based.

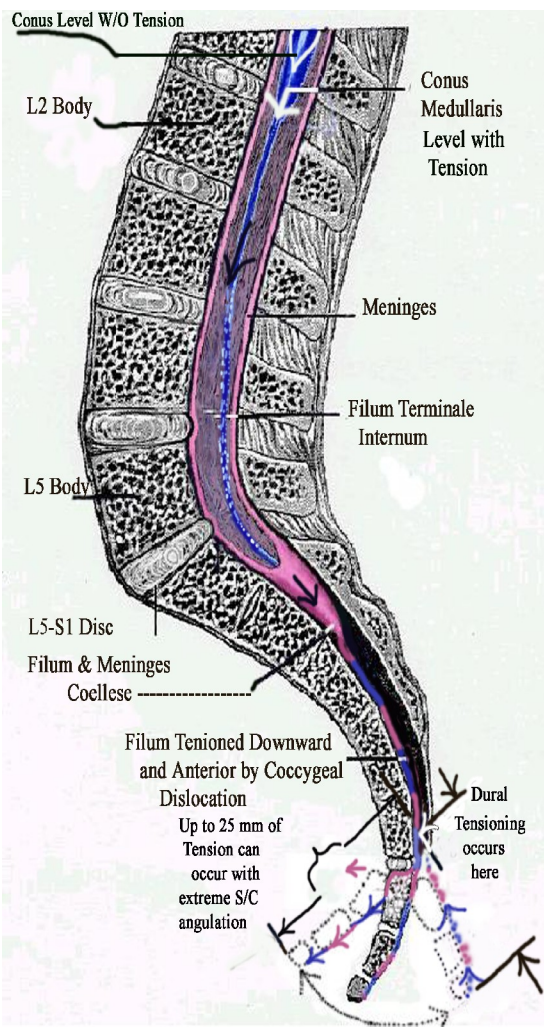
Clinically, the condition is readily recognized by testing spine flexibility and thigh strength. Our procedure, when successful, usually provides a characteristic immediate improvement in dural stretch signs such as straight leg raise (SLR) and motor strength? In good humor we like to joke that "it may not be a stretch" to suggest that coccyx hypomobility-induced dural tension may be the most under-tested and therefore under-diagnosed cause of lumbopelvic pain and neuromechanical impairment.

Once clinically illustrated, we are confident that each physician will spot many of these cases that used to pass for tight hamstrings, arthritis or discogenic pain. Once loss of coccygeal range of motion is identified and corrected a few times, the typical return of long-lost lumbar flexion and thigh motor strength is so obvious that each physician is sure to quickly suspect that the S/C syndrome could play a far-reaching role in spinal impairment and dysfunction.

But if the serious clinical natural of the S/C syndrome is valid, why has the coccyx escaped closer scrutiny by spine chiropractors, physicians and therapists? Perhaps it is because a coccyx injury's most serious symptom, up until now, had been considered the unfortunate location of its pain.

Ironically, the *pain* of coccydynia, or "coccygodynia" as our esteemed European colleagues would say, may be more of a nuisance than a disability. And while the *pain* of coccydynia can be serious, the affects of coccygeal dysfunction on the cord, spinal nerves and ganglia, with or without local coccygeal pain, may be of equal or greater impairment.

Thanks to the exhaustive work of Jean Yves Maigne, M.D.<sup>3,4</sup>, describing coccygeal anatomy, pathology, pain syndromes and criteria for surgical intervention, this mysterious and atypical vertebra is attracting the much needed attention and respect it deserves. Even so, our proposed coccyx-induced dural tension pathogen continues to, at best, escape full consideration by spine physicians and, at worst, is entirely overlooked and therefore confounds diagnosticians with its global affects on the nervous systems.



For example: Dr. Breig observed the spontaneous return of bladder function upon reduction of cervical fractures, suggesting that dural tension can exert distal effects on smooth muscle. This fact begs the question; if tension on the cervical cord can effect neurologic deficit in the sacral parasympathetic autonomics, what affect could dural tension, ostensibly triggered at the dysfunctional coccyx, have on the central and perhaps peripheral nervous systems?

By what mechanism is it possible that a cord disturbance, triggered by the dysfunctional coccyx, could create both a massive motor deficit and hypertonicity of the erector spinae group severe enough to restrict spine flexion by 20-60 degrees?

Although the exact mechanism of S/C-induced dural tension has yet to be fully understood, certain pieces of the puzzle are clear. Fortunately, treatment is quick and relatively easy. Moreover, patients often, if not usually, report definitive and comparatively long-lasting results when their coccyxes are set into full motion.

A hypothetical neuromechanical basis for the SacroCoccygeal syndrome, and its key clinical signs, is herein respectfully submitted.

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