

“Descended Sacrum”

A Structural Explanation for Low Back Pain and Cognitive Impairment

“Unresolved low back pain can lead to cognitive impairment... “

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Most people will have had at least one episode of low back pain in their lifetime. More recent research has indicated that if chronic low back pain is not resolved, this could lead to cognitive impairment.

The research also shows that effective treatment of low back pain can reverse the deteriorating effects observed in the brain of both structure and function.

As a Manual Therapist (RMT, IMTP) the majority of my practice is treating individuals who are experiencing chronic pain or intermittent / recurring pain. The therapy history that many of these clients share in common is that often times the core (arteries, veins, organs and investing fascia) are not addressed and the phenomenon of a descended sacrum has been overlooked.

By definition a ***descended sacrum*** is a sacrum that through downward applied forces through the spinal cord, finds itself in an inferiorly jammed position between the hip bones. This non-functional position makes it impossible for the joints that are formed by the sacrum and hips to function as designed.

This can create a host of symptoms:

- in the pelvis (chronically imbalanced joints)
- over active bladder
- spastic bowel
- rectal pain
- weak pelvic floor
- sciatica
- chronically injured / short hamstrings
- inability to touch the toes
- toe walking bouncing on the balls of the feet when walking

Compression of bones of the skull can result in cognitive changes:

- reduced ability to adapt to changing situations
- greater difficulty in problem solving
- emotional regulation is more challenging (over or under reacting)
- short and long term decision making is impaired



- ear pain , infections, eye dysfunctions, head pain over the forehead, back of head
- Autonomic dysregulation
- back pain and or stiffness that never really goes or stays away.
- What appears to be chronic low back pain and sacroiliac joint dysfunction.

As you can see the structural imbalances are not limited to the pelvis. The cause of injury that often creates this presentation is a whiplash injury (motor vehicle accident) or any history of a direct blow to the top, front or back of the head where the impact forces, taking a path of least resistance make their way down the spinal canal and impact the sacrum.

The direct impact on the head can in effect compress the skull bones in and down creating a vacuum effect, in essence compressing the brain tissue and blood supply that feeds that part of the brain. If this compression to the head is not alleviated this can lead to the cognitive changes mentioned in the Journal of Neuroscience article. The coverings around the spinal cord called meninges protect the cord and are attached inside the head, at the top of the neck and at the sacrum. As the sacrum is driven down these coverings experience a stretch. This downward stretch is transmitted from inside the head and down the length of the spine producing the above named symptoms. Fundamentally there is compression on the brain and a stretch on the spinal cord at the same time.

These symptoms can appear alone or clustered together and can vary in their intensity. At first glance they may appear unrelated but with closer investigation and the presence of a descended sacrum the fuller cause and effect picture reveals itself.

Recognition and appropriate treatment of a descended sacrum and the associated symptoms can eliminate low back pain, stiffness and re-balance a nervous system that has been under siege.

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