

Down the sacrum rabbit hole:

Part 2

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Narrative: Here I continue my presentation of an overview of sacral listings conceptualised by Gonstead. I provide the clinical rationale for listings of the sacral base which have clinical utility for sacral adjusting.

In particular I address the 'base anterior' listing.

These additional concepts take into account developmental anomalies such as lumbarisation and sacralisation.

Indexing terms: Chiropractic; Gonstead; technique; sacrum; sacral listings; anomalies; base anterior.

Introduction

In my previous article, ([here](#)) I reviewed some of our basic understandings of the sacrum. These concepts include the fact that the sacrum is a common sight of malformation which should always be evaluated. Additionally, human sacral segments S-1 to S-5 are essentially fused by age 12-14 and certainly by the age 24 to 30.

The only real exception to this is when there is a lumbarisation of S-1. I also discussed the sexual dimorphisms. These usually include a smaller sacral promontory and commonly a lack of S-3 articulation in the female sacral anatomy. These anatomical differences may be adaptations designed to create a larger birth canal and increased mobility and flexibility in the SI joints. '*... Women exhibit higher mobility, stress/loads and pelvis ligament strains compared to male SIJs*'. (1) It is also important to remember that a subluxation of the sacrum not only can be at the SI joint but also at the lumbosacral disc, and occasionally at both simultaneously.

... we should consider adding this Base Anterior sacrum listing to the Gonstead analysis and have it taught as part of the Gonstead system of spinal adjusting technique...



The base anterior listing

In this article, I want to focus on the lumbosacral disc and expand on the proposed '*base anterior sacrum*' listing. (2) This is a description of a subluxation that was not described in the Gonstead Seminars or in the primary Gonstead text. (3) In the next article, I want to expand on my discussion of the unusual architecture of the sacroiliac joint which is not only auricular but also '*propeller shaped*'.

The '*propeller shaped*' (4) SI joint has not been widely known and is an important consideration when evaluating and adjusting the sacrum at the SI joint; especially the inferior aspect of the SI.

When Gonstead bought his practice from Dr BJ Jones in 1923, he struggled for the first few months and was so discouraged that he considered giving up practice. (5) Fortunately, he convinced Jones to buy back a half interest (6) in the practice and help him gain confidence and momentum. He gradually gained enough confidence to continue and he developed his clinical practice even after Jones left. Gonstead brought his considerable abilities of focused concentration and visualisation to bear on the clinical problems he confronted. In the 1930's medical literature began to identify the 'intervertebral disc as a culprit for low back pain'. (7) This era was later named the 'Dynasty of the disc'. (8)

Whether Gonstead read the medical literature or came to this conclusion independently through clinical findings and his own dissection research in the cadaver lab at *Lincoln College*, he came to understand that the disc was the key to evaluating and reducing subluxations thereby restoring proper nerve function. His curiosity and drive to really understand the mechanisms of how the spine and nervous system functions was very important in his journey.

'I wanted to see how it was that the nerve pressure was produced. I found that the vertebrae slipped on the disc, dislodging the nucleus which protruded into various parts of the disc producing the pressure on the nerves. I found that the most common area was the intervertebral foramen. The technique of adjusting I developed consisted of moving the segments onto the disc, repositioning the nucleus. Therein lies the uniqueness of my work, the Gonstead Technique has a specific application on the affected segment or segments only'. (9)

Gonstead's revolutionary disc concept along with his breakthrough in understanding that the Iliac can misalign along both the X and Y axis are foundational to his system. Learning the Gonstead system of analysis and then mastering the techniques of correction takes a lifetime of exceptional diligence and attention to detail.

While Gonstead and his team developed and documented his analysis of the potential subluxations in the spinal column, pelvis and extremities, many doctors have found that the analysis of sacral misalignments somewhat lacking. We can only speculate as to why Gonstead seemed to minimise the sacrum as a site for subluxation, but it does leave us with an opportunity to add to the system that he left us.

The 'Anterior Sacral Base' aka 'Posterior Sacral Apex'

This misalignment/potential subluxation was first proposed by Dr Tom Sherman and Dr Richard Thornton probably sometime in the 1990's. Both of these doctors were long term students of Dr Gonstead and co-founders of The *Gonstead Clinical Studies Society* (GCSS) which was patterned after the *Monterey Bay Gonstead Clinical Studies Society*. They founded GCSS for the purpose of promoting research, standardising teaching and developing a system to credential field doctors in the Gonstead system.

Sherman and Thornton independently discovered through their clinical experience a relatively rare sacral mis-alignment which occurs at the lumbosacral joint. It is essentially an anterolisthesis, the forward slippage of the base of the sacrum beneath the L5 disc. It is usually found when the Ferguson's angle is above 45° which makes moving the L5 vertebrae forward and up onto the L5 disc very difficult if not impossible. The analogy to this listing is the Anterior Superior occipital condyle. In both cases, there is an anterior subluxation and the contact point is at a location at fairly distant from the joint being moved. This analogy is appealing due to the symmetry i.e. these unique anterior subluxations only exist at both ends of the spine (at the top and at the bottom).

The normal sacral motion (rotation around a transverse axis) includes 'nutating' (forward nodding) and 'counter-nutating' (backward nodding). (10) Here it should be noted that there are likely more than one transverse axis. (11) This will be discussed in more detail in my next article.

The Posterior Sacral Base aka Base Posterior Sacrum can be described as a Hyper-counter-nutated sacrum. This misalignment is probably most commonly a result of a hard fall on the buttocks. This fall can cause a force to the sacral apex and 'may cause the sacrum to be driven posterior-ward at the base'. (12) This can cause the sacral articular facets to fail. Below is an example of a Posterior Sacral Base.

Posterior Sacral Base AKA Base Posterior Sacrum

(note the very small Ferguson's Angle)



The Anterior Sacral Base aka Posterior Sacral Apex can be described as a Hyper-nutated sacrum. The mechanism of this misalignment can be a result of trauma from a fall onto the sacral base. It can also be a result of chronic anterior stress on the sacral base. There is likely a predisposition for this condition from weakened or laxity of the sacrotuberous and sacrospinal ligaments (13) which are important in the 'forced closing mechanism' of the pelvis and resists shearing forces along the SI joints. These ligaments resist and normally limit how far the sacrum can move into forward nodding (nutating). (14) It has been my experience that this listing is more common in post-partum women. Perhaps this is due to the relaxing effect of pregnancy hormones on ligaments as well as the anterior forces on the sacrum during gestation.

Sacral Apex Posterior AKA Sacral Base Anterior

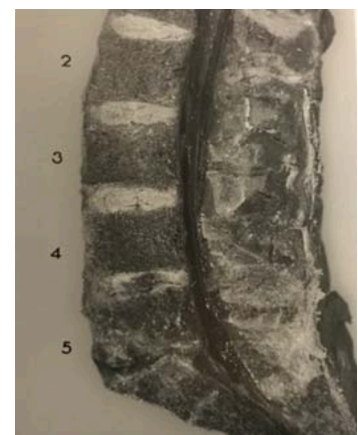
(note the very steep Ferguson's angle)



The Apex Posterior sacrum adjustment is usually side posture with the patient's knee flexed cephalad enough to reduce the hyperlordosis of the lumbar spine.

Contact is at S-4 with a P to A and slightly inferior to superior line of drive.

The image (right) is a dissection of a spine that shows a sacrum which has a base anterior sacrum. This is reprinted here with permission of the publisher. (15)



Conclusion

I have several other examples of this Base Anterior subluxation in my files so this is not too rare. It is my opinion that we should consider adding this Base Anterior sacrum listing to the Gonstead analysis and have it taught as part of the Gonstead system of spinal adjusting technique. I have had excellent results with this adjustment and encourage any doctor to evaluate for it. I can share the case study I wrote up for the patient whose x-ray appears above upon request or perhaps in a future GCCS newsletter edition.

In my next article, I will discuss the unusual propeller shape of the sacroiliac joint and the implications of understanding this on a deeper analysis and more specific approach to correction of the sacrum.

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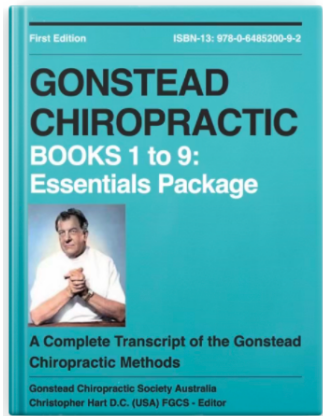
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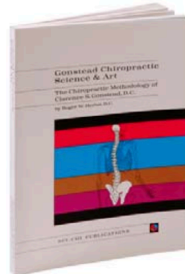
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Resources



Available in the Apple Bookstore. Each chapter features 3D movie clips of patient set-ups.

The Chapters
Herbst, Roger W.
The Art and Science of Chiropractic
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