

# Gonstead approach to the Chiropractic management of Levator Ani syndrome

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**Abstract:** This paper will discuss the resolution of levator ani syndrome symptoms using a Gonstead approach to the Chiropractic management of a 67- year-old man with 'Levator Ani' syndrome.

**Indexing Terms:** chiropractic; levator ani syndrome; sacrum; sacral segment S3;Gonstead Methods; Men's Health.

## Introduction

**L**evator ani syndrome is often referred to as proctodynia or levator syndrome. It is episodic and caused by spasm of the *levator ani* muscle. The aetiology is unknown.

Symptoms can include a dull ache in and around the anus and higher in the rectum with a feeling of rectal pressure or fullness and burning. The pain may also be felt in the low pelvis or perineum. Levator ani can often be overlooked as an important cause of rectal pain and fullness as a lot of effort is often put into excluding more sinister bowel pathologies such as bowel cancer.

## Case History

A 67y man presented with persistent rectal pain, fullness and dull lower back pain. This pain had been keeping him up at night such that he had been unable to sleep for any longer than a two-hour period for the preceding three months. He had a diagnosis of metastatic prostate cancer made six years previously and was currently under the care of both a urologist and oncologist.

Due to the nature of his pain suggesting bowel involvement, he had also recently been seen by a gastroenterologist and had inguinal hernia repair by a general surgeon. He presented with a plethora of tests including; bone scan, MRI, CT, and various recent blood tests, all of which demonstrated no pathology or underlying obvious reason for his persistent symptoms of pain

*... the levator ani muscle is a paid generator in the lower pelvis. The use of Gonstead methods to identify subluxations within the pelvis led to corrections' led to pain relief and improved sleeping habits in this 67y male patient'*



and feeling of fullness in the rectum. Additionally, the patient had tried physiotherapy and acupuncture.

On his Medical Doctor's request he presented for Chiropractic treatment.

### **Clinical Findings/Assessments**

A full orthopaedic and neurological examination was performed. Clinically significant examination findings included that the patient showed slight tenderness at the lower aspect of the sacrum (S3) and the sacrococcygeal joint. The patient explained however that this was not the pain he had been experiencing.

All other clinical tests were unremarkable, with palpation and motion palpation unable to reproduce the pain.

### **Radiographic Examination**

Radiology findings were somewhat helpful in understanding the aetiology of the pain. MRI thoracic and lumbar spine showed sclerotic lesions at S1, T1, T2, T8 and L2. The appearances were in keeping with sclerotic bone lesions however the possibilities of bone islands or sclerotic metastases were raised. This had been further followed up with bone scan, which excluded active metastases. Full spinal A-P and lateral x-rays for chiropractic assessment was unavailable however Gonstead listings of the pelvis were: P-L<sub>1</sub> sacrum, L IN<sub>6</sub> Ilium.







## Chiropractic Diagnosis

Sacral segmental posteriority subluxation and associated ligament strain was diagnosed. This diagnosis was based on the clinical history, the radiographic findings, AND other eliminated differential diagnoses based on recent test findings.

## Treatment and Results

The initial adjustment made was an S3 posterior, side posture, push move, with right side down, on the pelvic bench. Three days later, the patient returned reporting that he had experienced minimal change to his symptoms. The adjustment was then repeated.

The next day the patient returned following a fall where he had injured his right hip. He reported that prior to the fall he had experienced significant relief from his rectal pain however was now experiencing right sacroiliac pain. At this stage, the sacrum was left alone and his right EX was adjusted. The rectal pain did not reappear at this stage.

The patient was then reviewed two days later at a fourth visit where he was found to be still relatively pain free. He reported having 4-5 uninterrupted hours of sleep at night and no longer needed to sleep on a recliner. No further adjustment was given at this point.

Five days later the patient returned stating his rectal pain had recurred after sleeping on hard beds whilst being away on a trip. Additionally this was made worse by a fall that had also occurred whilst away. Another S3 Posterior adjustment was performed as side posture.

On review one week later, he expressed that he was no longer experiencing rectal pain but was still aware of fullness in the rectum. He was not adjusted at this stage.

On his seventh visit one week later the patient received his 4<sup>th</sup> S3 adjustment after he reported that he was 80% better but still noted slight fullness.

The patient was reviewed weekly for two more weeks. He reported sleeping well through the night and as such required no further adjustments on these days.

On review at one month, the patient remained pain free and reported that all his original symptoms had resolved.

## Discussion

The Sacro-coccygeal region is a complex and difficult area for the practitioner to diagnose and treat. It is a region fraught with ligamentous, neurological and muscular intricacies. An understanding of the nerve supply, local musculature and ligamentous structures will aid in the both the assessment and diagnosis of the presenting problem and ultimately lead the practitioner to accurately adjust the most appropriate spinal level.

The Levator ani is the major muscle of the pelvic floor and as such plays a crucial role in the maintenance of continence. It forms a funnel- shaped diaphragm in the pelvis between the lateral hip walls, with the pubis anteriorly and the coccyx posteriorly.

## Levator Ani Muscle

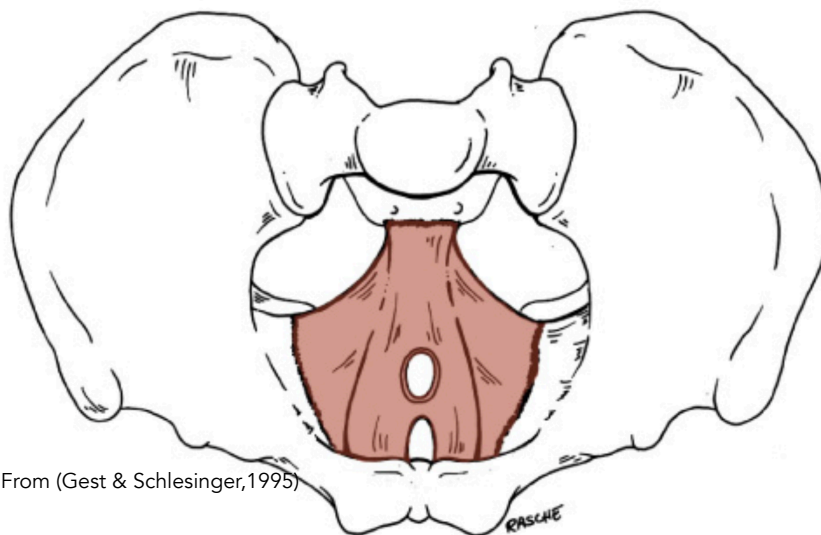


Figure 1: Levator ani muscle. From (Gest & Schlesinger, 1995)

Often, levator ani is considered as several separate muscle parts:

- ▶ *pubovaginalis*
- ▶ *coccygeus*
- ▶ *iliococcygeus*
- ▶ *pubococcygeus*
- ▶ *puborectalis*

however they have common features:

- ▶ origin: from a tendinous arch between the pubis and ischial spine on the internal surface of the pelvis
- ▶ insertion: perineal body, external wall of anal canal anococcygeal ligament coccyx. (Margulies et al. 2007)

The neurological supply to the levator ani muscle is as follows:

- ▶ *pubococcygeus* and *iliococcygeus*: *levator ani* nerve (S4), *inferior rectal* nerve from *pudendal* nerve (S3, S4), coccygeal plexus
- ▶ *puborectalis*: S3, S4 *Levator ani* nerve. (Wallner et al, 2006)

It stands to reason that adjusting the Sacrum has an effect on the *levator ani* muscles, the anal canal and the *anococcygeal* ligament. This case demonstrates however that specific and targeted adjustment at the level of S3 can have dramatic results.

It was found that contacting the third sacral segment had a direct impact on the origin and insertion of the various *levator ani* muscles listed, thereby releasing the tension in these muscles and facilitating pain relief. Additionally this demonstrates that the S3 spinal nerve innervates the *pubococcygeus*, *iliococcygeus* and the *puborectalis* muscles and adjustment at this spinal level can facilitate pain relief in these muscle areas.

## Conclusion

Specificity, combined with a thorough knowledge of underlying structures and respect for the adjustment given are all key elements for the repair and recovery of '*levator ani syndrome*'. Whilst it could be argued that 'sacral subluxation' rather than 'levator ani syndrome' causes rectal pain, the Gonstead system of treating the spine has a unique way of detecting the problem, and delivering an segment-specific adjustment.

It is due to the accurate and timely adjustments that the Gonstead Method delivers that the repair process is facilitated. This is demonstrated clearly in the case of *Levator Ani* syndrome where the choice to '*leave it alone*' is as important as the choice to adjust. The judicious clinical judgement exercised by the Gonstead technique not only prevents over adjusting but also facilitates targeted treatments and in the case of levator ani syndrome, yields dramatic results.

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## About

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