

# Influence of Lumbar Stenosis on Concomitant Sacroiliac Joint Pain: Short-Term and Preliminary Long-Term Results

Konrad Bach MD; Thomas B Freeman MD

### Introduction

Many patients have both claudication symptoms due to lumbar stenosis as well as concomitant sacroiliac joint (SIJ) pain. We hypothesize that this SIJ pain is secondary to walking with a flexed posture to alleviate claudication symptoms. If true, we hypothesize that this "secondary SIJ pain" will spontaneously improve after successful lumbar laminectomy or laminectomy and fusion when patients resume walking upright.

#### **Methods**

A retrospective review of charts from 01/01/2014 through the present was performed to identify sequential cases of adults 35 years of age or older with concomitant surgical spinal stenosis with neurogenic claudication as well as SIJ pain. SIJ pain was diagnoses clinically +/confirmatory injection (= 50% improvement in SIJ pain). A 10-point VAS was used to assess SIJ pain preoperatively, at three months postoperatively, and at most recent follow up.

#### Results

17 contiguous patients (8 female) met entry criteria. 10 were treated with decompression alone, 7 with decompression and fusion. Mean SIJ VAS score improved in the decompression alone group by  $8.0\pm2.4$  $(8.9\pm1.7 - 0.9\pm2.2;$ p<0.0005). Mean SIJ VAS score improved in the decompression and fusion group by 8.9±2.0  $(9.4\pm1.0 - 0.6\pm1.1)$ p<0.0005). There was no significant difference in VAS change between those with SIJ pain confirmed by injection (n=7) and those diagnosed clinically.

#### **Conclusions**

Sacroiliac joint pain shows rapid and dramatic improvement following lumbar laminectomy alone in patients with lumbar stenosis with claudication. The addition of a fusion also leads to a similar magnitude of improvement in SIJ pain. These results suggest that SIJ pain in patients with stenosis and claudication is secondary to walking in a flexed position, corrected rapidly after successful spinal decompression. Further research is needed to determine if other sagittal deformity corrections alleviate concomitant SIJ pain.

## **Learning Objectives**

By the conclusion of this session participants should be able to: 1) Understand the relationship between spinal stenosis with neurogenic claudication and concomitant SIJ pain, 2) Review the criteria for the clinical diagnosis of SIJ pain, 3) Review treatment options for patients with concomitant lumbar spinal stenosis with neurogenic claudication and SIJ pain.

[Default Poster]