

## ENDOSCOPIC TREATMENT OF "SACROILIAC JOINT" PAIN

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### Rationale/Background/Objective:

Traditionally, low back pain lateral to the midline in the area of the posterior superior iliac spine has been attributed to the sacroiliac joint and treated surgically with fusion. Believing the pain is often wrongly ascribed to degenerative disease of the SI joint, which is a very immobile joint, this study utilizes an innovative endoscopic surgical approach to the iliac crest to debride the area of the tendinous attachment to the iliac crest as it seeks to demonstrate the effectiveness of the surgical technique and confirm the more likely probability of a degenerative tendinous condition where the lumbar fascia attaches to the iliac crest and posterior superior iliac spine.

### Methods:

In this paper, we report the results of a retrospective review of 12-month follow up data to determine success of surgical technique and pain relief. Included in this study are 83 patients comprised of slightly more women (59%, n=49) than men (40%, n=34) with a mean age of 68 years (Median=70 [Min=29, Max=88]) who had endoscopic debridement of the iliac crest/ilium between Sept 2001 and July 2003. A local block that relieves 75-100% of the pain is the preferred pre-operative criterion. While not inclusion or exclusion criteria, 88 per cent (n=73) of the patients had no previous back surgeries and 12% (n=10) had some type of previous open surgical procedure of the back.

Post-operative pain relief, repeat SI joint debridement, and the presence of post-operative complications in the 12 months following surgery are criteria used to assess the success of the surgical technique. Pain relief is evaluated by 12-month follow-up subjective pain assessments utilizing the Visual Acuity Analogue Scale (VAS).

### Results/Outcomes:

At 12-month follow-up to SI joint debridement, overall, more than half the patients (57%, n=47) had good to excellent postoperative outcomes. Of this group, 33 per cent (n=27) of the patients had 100% relief of pain subjectively described as mild (n=1), moderate (n=9), severe (n=13), or unbearable (n=4) and 24 per cent (n=20) had 50% to 90% relief of baseline pain subjectively described as mild (n=1), moderate (n=7), severe (n=9), or unbearable (n=3). Approximately 43.37 per cent (n=36) had poor to fair outcomes. In this patient group, approximately a third of the patients (36.14%, n=30) had no relief of pain subjectively described at baseline as mild (n=1), moderate (n=6), severe (n=7), or unbearable (n=10). A small percentage (7.23%, n=6) indicated 10% to 45% relief of moderate (n=2) or severe (n=3), pain.

In the study group, 78 per cent (n=65) had pre-operative nerve blocks to assess pain relief. Of the 65 patients with post-injection assessments, 95 per cent (n=62) had 75% to 100% relief of pain pre-operatively. There were 10 (12.20%) surgical revisions. At 12 month follow up, 40

per cent of the patients having surgical revision of prior SI joint debridement had 85% (n=1) and 100% (n=3) relief of pain, 50 per cent (n=5) had no relief of pain, and one patient indicated minimal relief of pain. Two patients (2.41%) had post-operative infection. There were no other complications and no post-operative mortalities.

### **Conclusions:**

Performed in an out patient setting, our "SI joint debridement" is really a release of the degenerative tendinous soft tissue in the area of the posterior superior iliac spine and adjacent iliac crest utilizing a Holmium laser in addition to partial removal of a thin slice of ilium with a high speed Burr. By partially releasing the tendinous attachments to the ilium in the vicinity of the posterior superior iliac spine, good to excellent pain relief occurred in 57 percent (n=47) of the study population with approximately half (n=27) of this patient group having 100% pain relief. The cautious success of SI joint debridement as an effective treatment for relieving SI joint-associated pain indicates the need for further investigation into the possibility that the painful condition traditionally associated with the sacroiliac joint is indicative of a degenerative tendon condition rather than degenerative joint disease.