

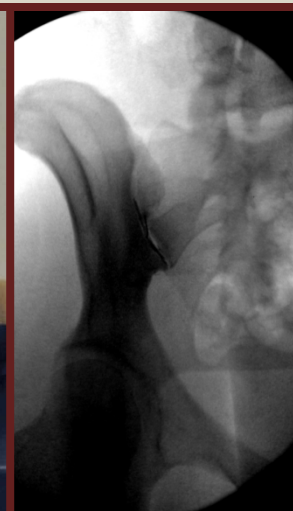
Predicting Reliability of Preoperative Examination and Injections Prior to MIS

Sacro-Iliac Joint Fusion

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Purpose

Minimally Invasive Sacro-iliac Joint (MIS SIJ) Fusion has been described as a technique for treating patients having pain originating from the SIJ. Outcomes from such a procedure would be expected to vary based upon patient selection. Diagnostic injections paired with physical exam have been considered the diagnostic tools of choice for this ailment. A study assessing the predictive value of pre-operative assessment in this group of patients would be useful for indicating surgical candidacy.



Results

Improved or resolved physical exam findings:

- 15/17 (88.2%)
- (95% confidence interval 64.4%, 98.0%)

6 months post-op mean improvement:

- VAS Back 44.1 (P<0.001)
- VAS Leg 32.3 (P=0.025)
- ODI 20.2 (P=0.005).

Methods

A consecutive case series from a single surgeon performing 19 MIS SIJ Fusions was assessed. 2 patients were excluded due to multi-trauma. Physical exam including pelvic compression, FABER maneuver and tests for point tenderness were performed. Patients with a history and at least 2 of the aforementioned exam findings consistent with SIJ pain had fluoroscopically guided SIJ injections performed on 2 separate occasions. If both injections demonstrated at least 75% relatively immediate relief of pain, it was considered a positive diagnosis of SIJ pain and that MIS SIJ Fusion was an option. Patients were then examined post-operatively and functional outcomes differences were measured.

Conclusions

Stabilization of the SIJ after confirmation of diagnosis with history, physical exam and diagnostic injections appears to resolve SIJ symptoms to a significant degree in approximately 88.2% of patients. This would suggest that disorders of the SIJ can be confidently diagnosed and this data could help define a method of diagnosis and help to set patient expectations when indicated for MIS SIJ Fusion.