Interventions for Sacroiliac Dysfunction

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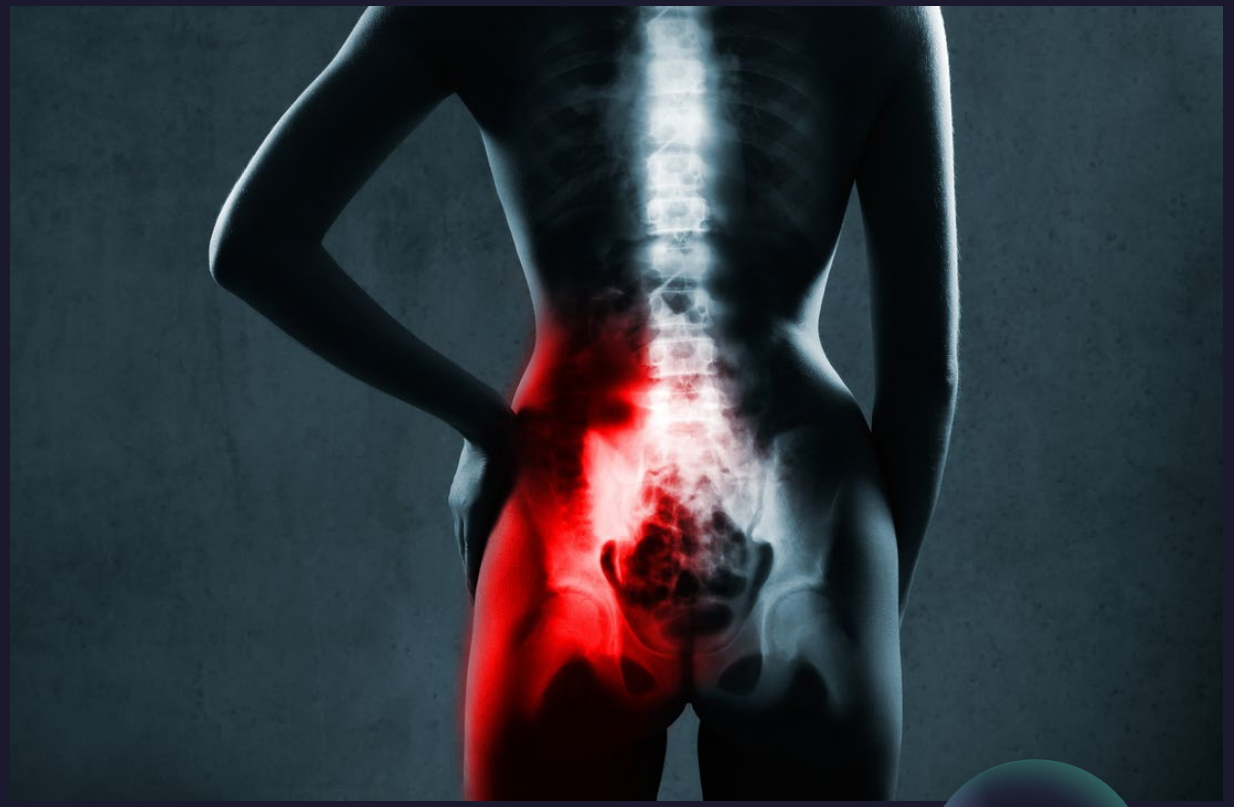
Disclosures

- Consultant for Abbott Medical
- Minority owner of Advanced Pain Care

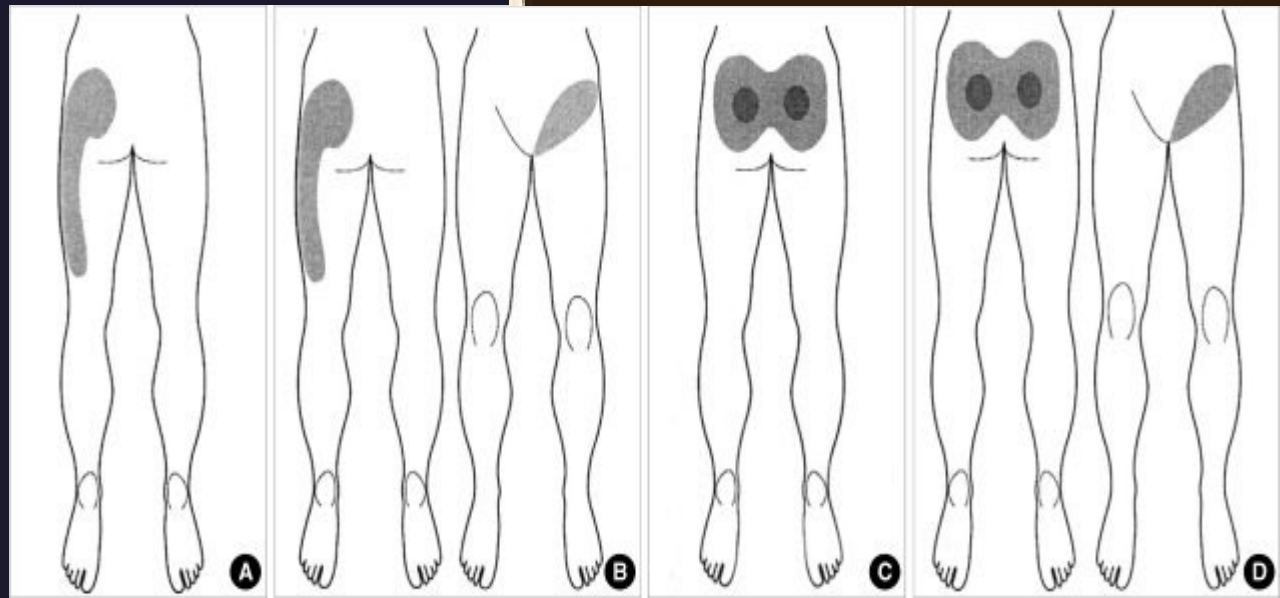
Sacroiliac Interventions



- Sacroiliac pain presentation
- Exam findings
- Sacroiliac Joint Injection
- Sacral Lateral Branch Block and Ablation
- Sacroiliac Fusion
  - Lateral Approach
  - Percutaneous Posterior Approach
- Peripheral Stimulation

Pain Presentation

- 15-30% of Low back pain
- 40-60% have originating injury
- Unilateral or Bilateral
- Can radiate into the hip, thigh and even calf
- Pain with prolonged sitting, rising to stand, standing one leg, bending forward and walking up stairs
- Fortin Finger Sign



Exam

Three Exam Findings confirms pain from a Sacroiliac origin

Distraction

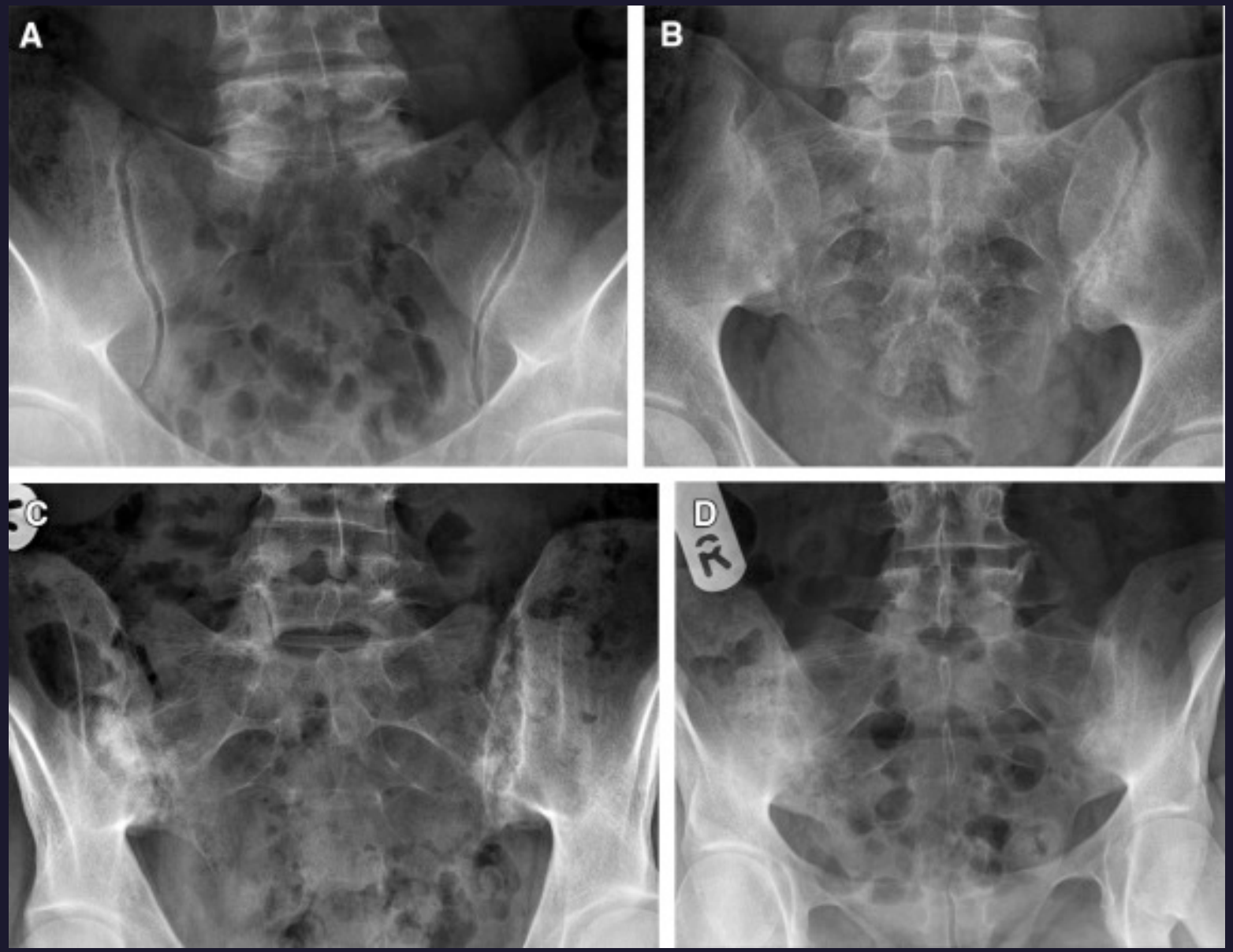
Thigh Thrust

Compression

FABER

Gaenslen

To Image or Not to Image?



Interventions

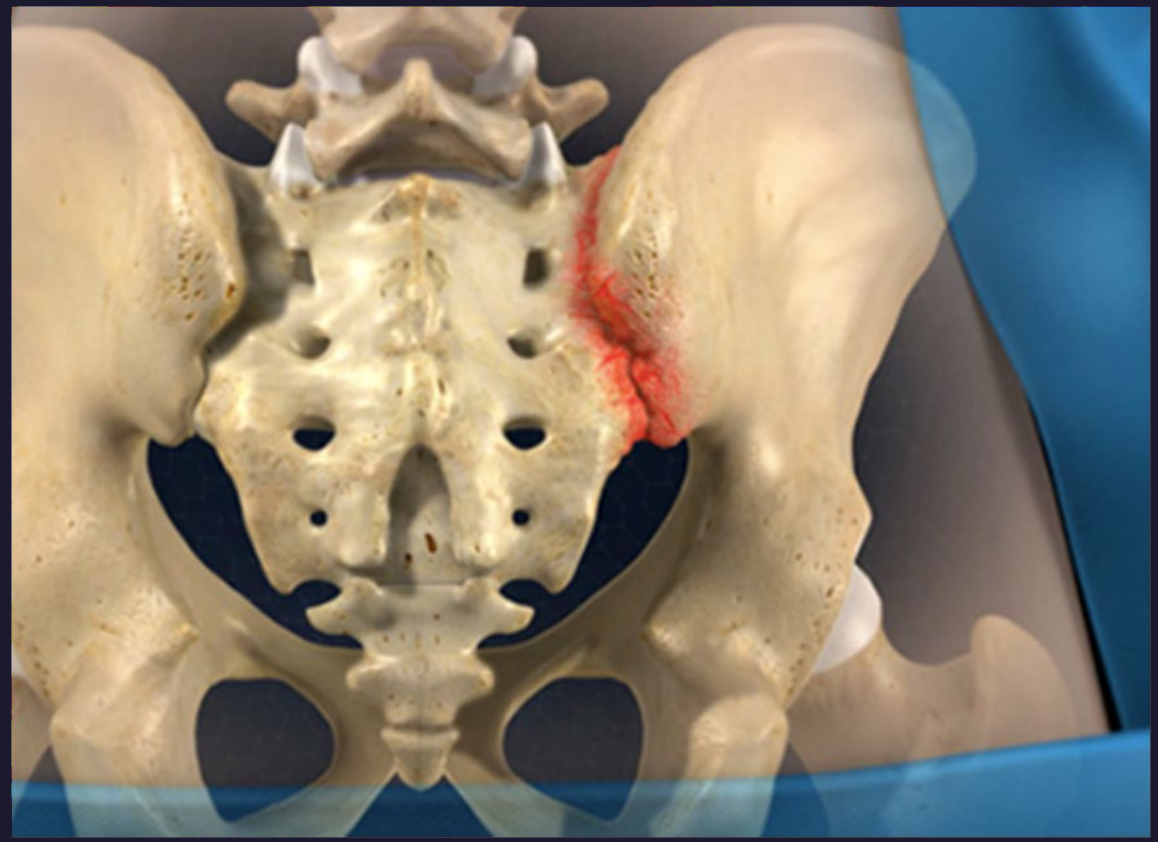
Manual Therapy

Sacroiliac Injection

Sacral Lateral Branch Block/Ablation

Sacroiliac Fusion

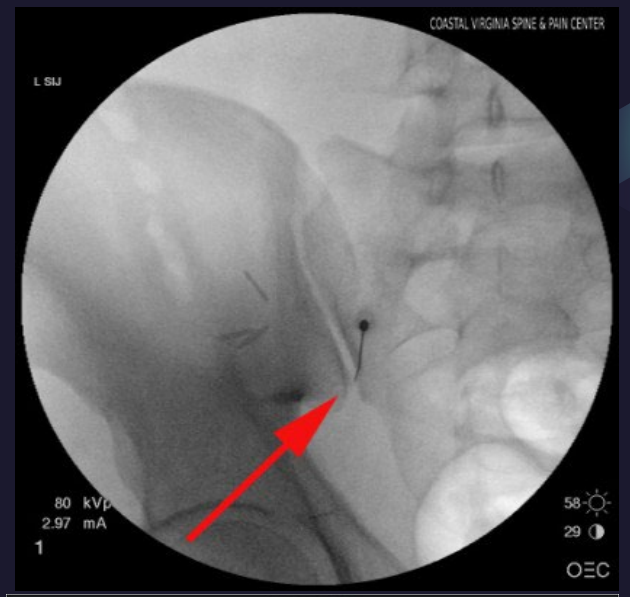
Peripheral Stimulation

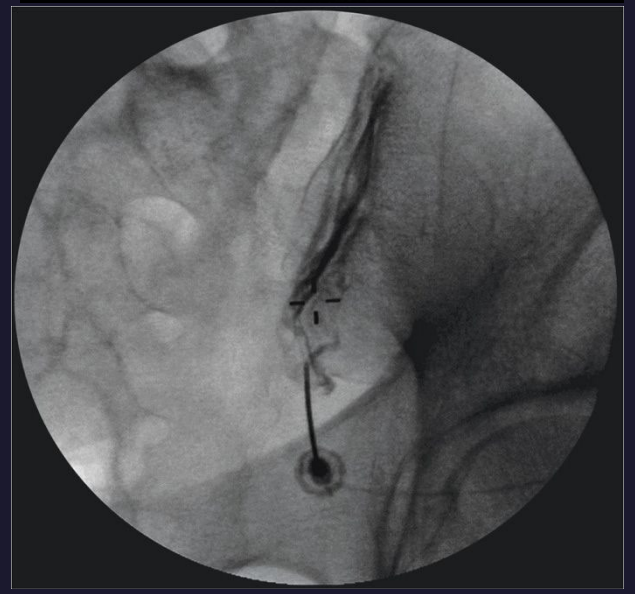


Sacroiliac Joint Injection

- Recent review of 15 studies for sacroiliac joint injections
  - 468 injecitons in 268 patients
  - Two small controlled studies showed significant results over placebo
  - Ten open studies showed 80% response rate with mean duration of improvement for 8 months

Typical clinic goal of 50-70% relief for greater than 3 months

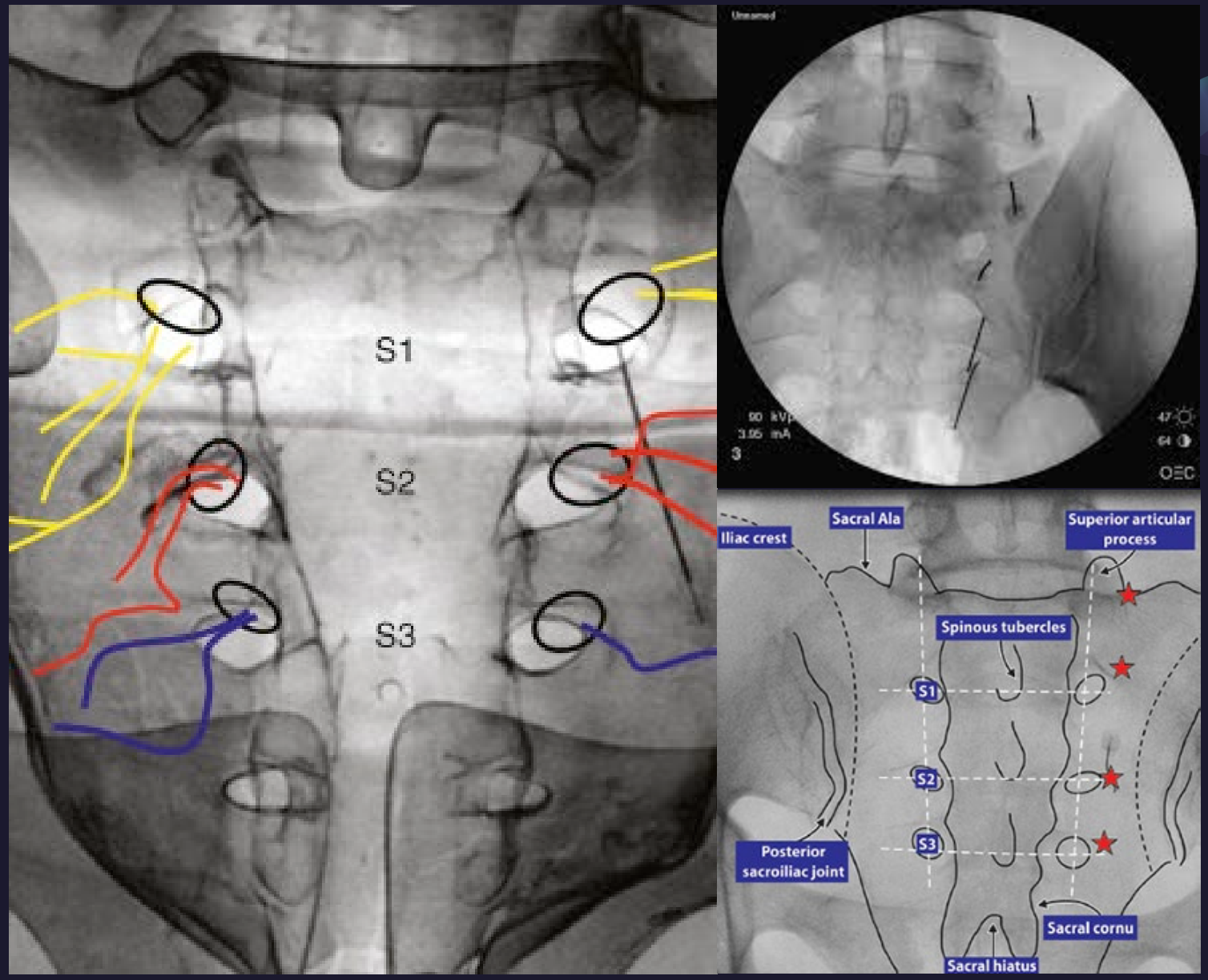




Wendling D. Local sacroiliac injections in the treatment of spondyloarthritis. What is the evidence? Joint Bone Spine. 2020 May; 87(3):209-213.

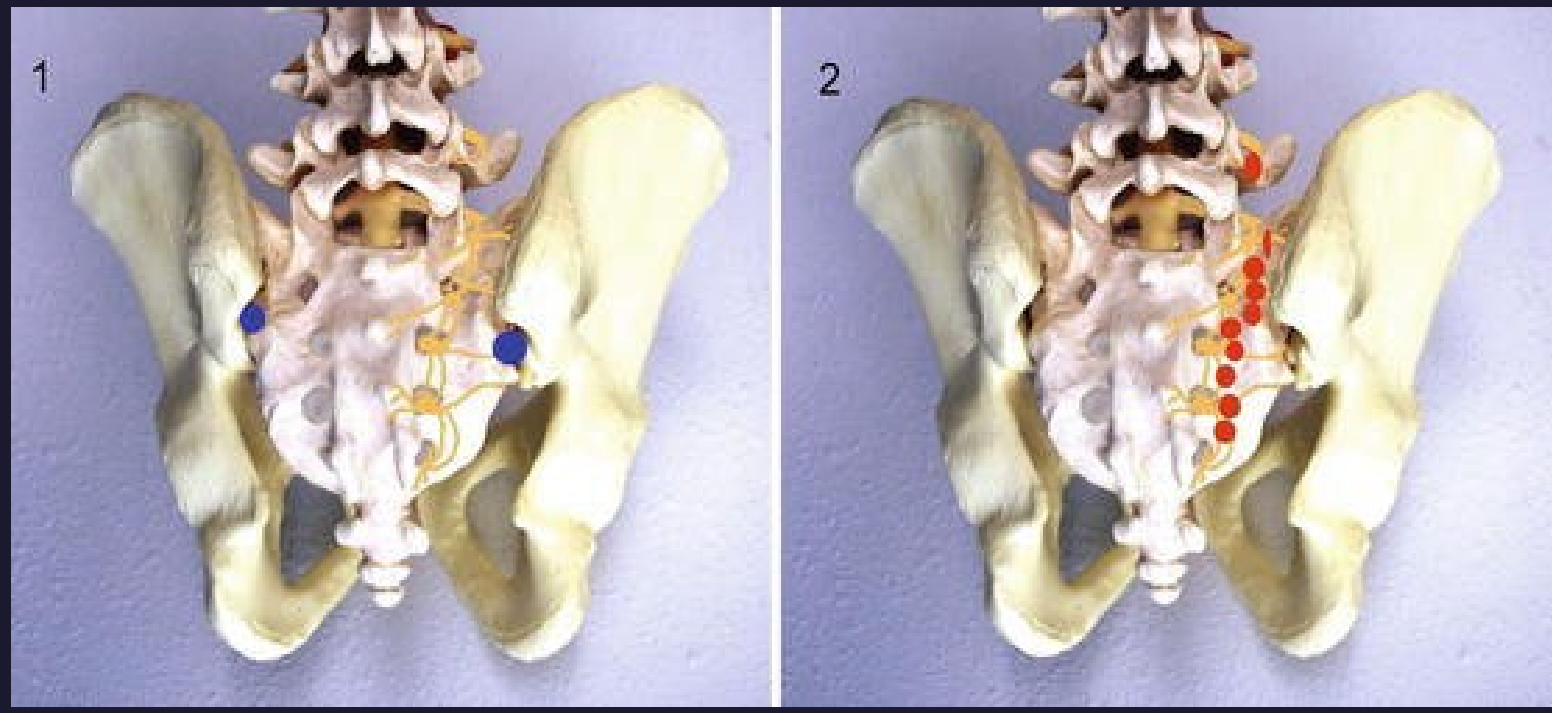
Sacral Lateral Branch Block

- Sacroiliac innervation reported from L5 primary dorsal rami and S1-3 lateral branches
- Varied anatomic location lateral to the sacral foramen
- Lateral Branch Block is primarily used as a diagnostic block in work up for ablation



Sacral Lateral Branch Ablation

- Multiple studies reporting sustained relief for at least 6 months in over 60% of patients
- Can be difficult to capture all the innervating branches



- Falowski, Steven et al. A Review and Algorithm in the Diagnosis and Treatment of Sacroiliac Joint Pain. J Pain Res. 2020 Dec 8;13:3337-3348.

Lateral Fusion

- Level 1 two year randomized control study comparing MIS lateral SI fusion to conservative therapy
    - 55.4 point improvement in ODI compared with 12.2 in conservative arm
    - 100 VAS scale reduction of 55.4 points compared to 12.2 in conservative arm
- MIS SI fusion has a reported 11.1% complication rate
    - Increased pain, Hematoma, Wound Infection , and Sacral Nerve Root Impingement
- Prolonged recovery
    - Six weeks of ambulation with a walker

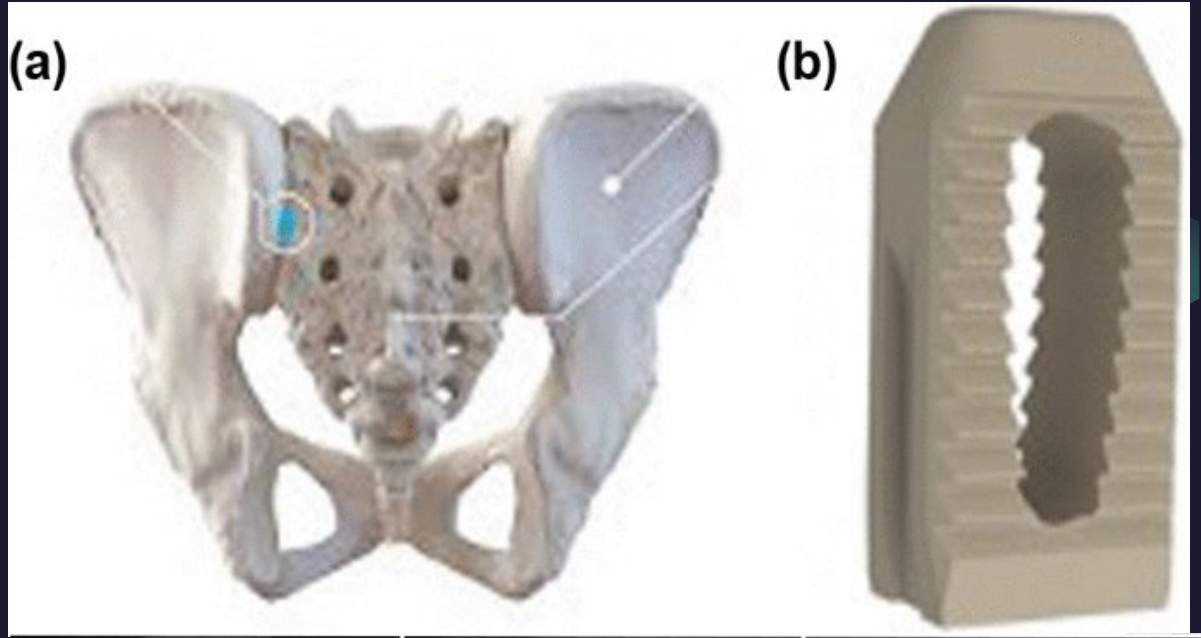
Falowski, Steven et al. A Review and Algorithm in the Diagnosis and Treatment of Sacroiliac Joint Pain. J Pain Res. 2020 Dec 8;13:3337-3348.

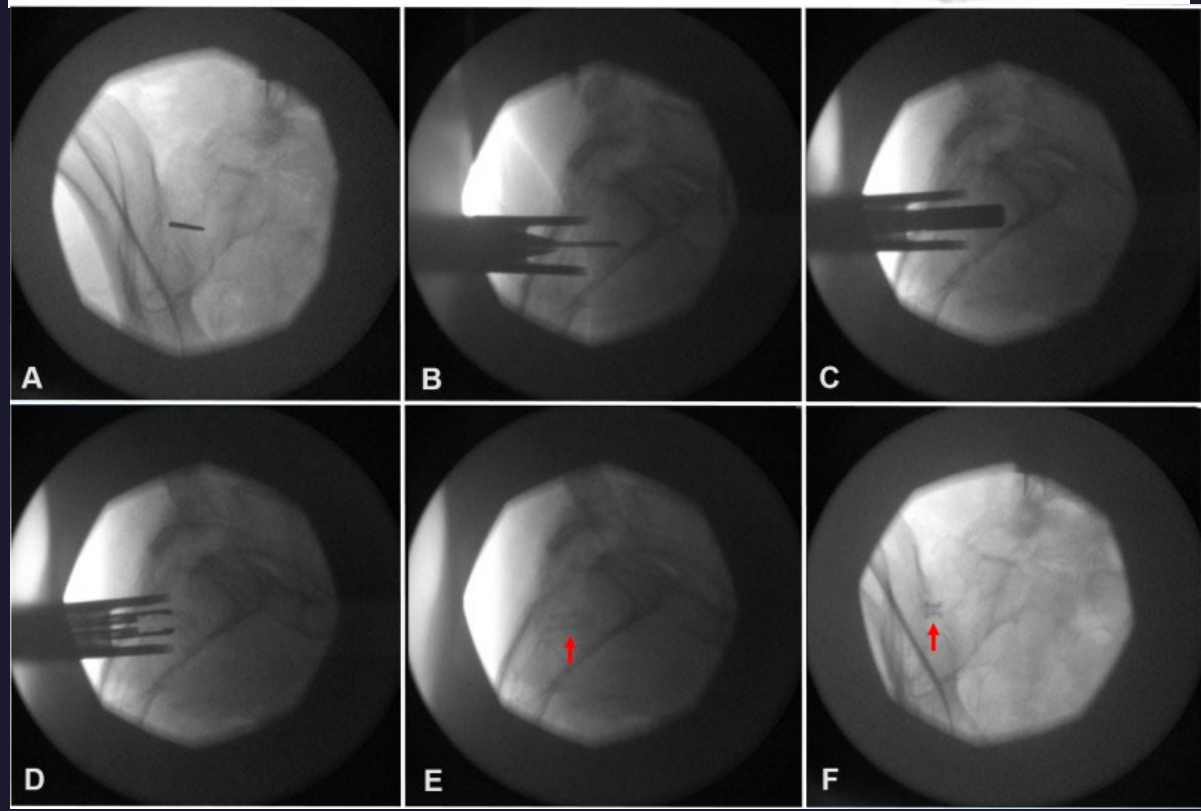
Polly DW, et al. Two-year outcomes from a randomized controlled trial of minimally invasive sacroiliac joint fusion vs non-surgical management for sacroiliac joint dysfunction. Int J Spine Surg. 2016;10:28.

Percutaneous Fusion

- Study for percutaneous SI joint fusion with identical protocol as the MIS lateral fusion study is in process.
    - Early data reported by Falowski earlier this year show similar beneficial outcomes with fewer surgical adverse effects
- Sayed published a study of 50 patients followed for 613 days showed NRS reduction from 6.85 to 2.86 with no major reported adverse events

Sayed D, Balter K, Pyles S, Lam CM. A Multicenter Retrospective Analysis of the Long-Term Efficacy and Safety of a Novel Posterior Sacroiliac Fusion Device. J Pain Res. 2021 Oct 14;14:3251-3258.

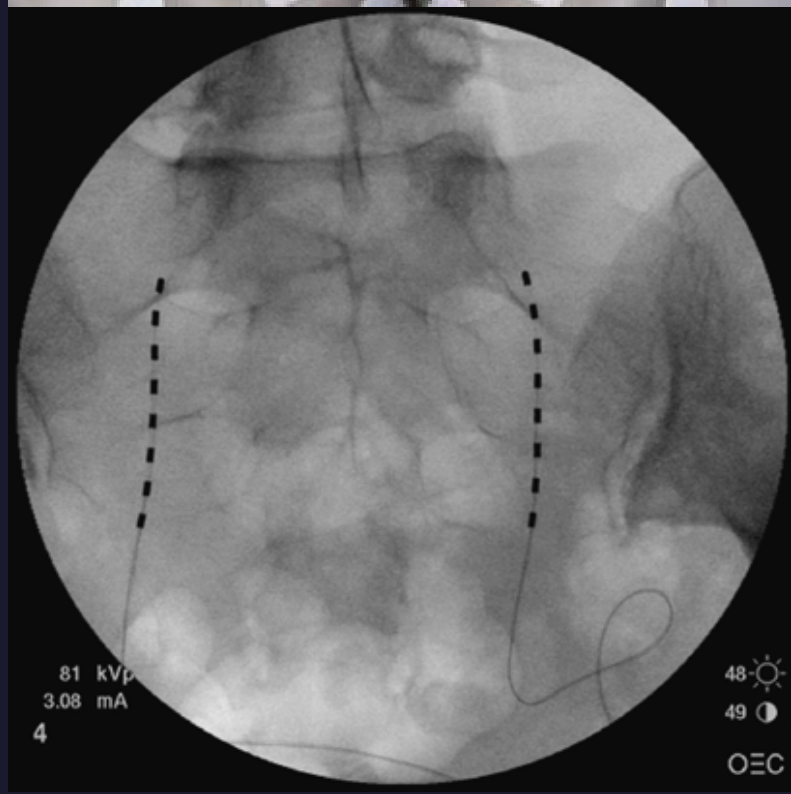


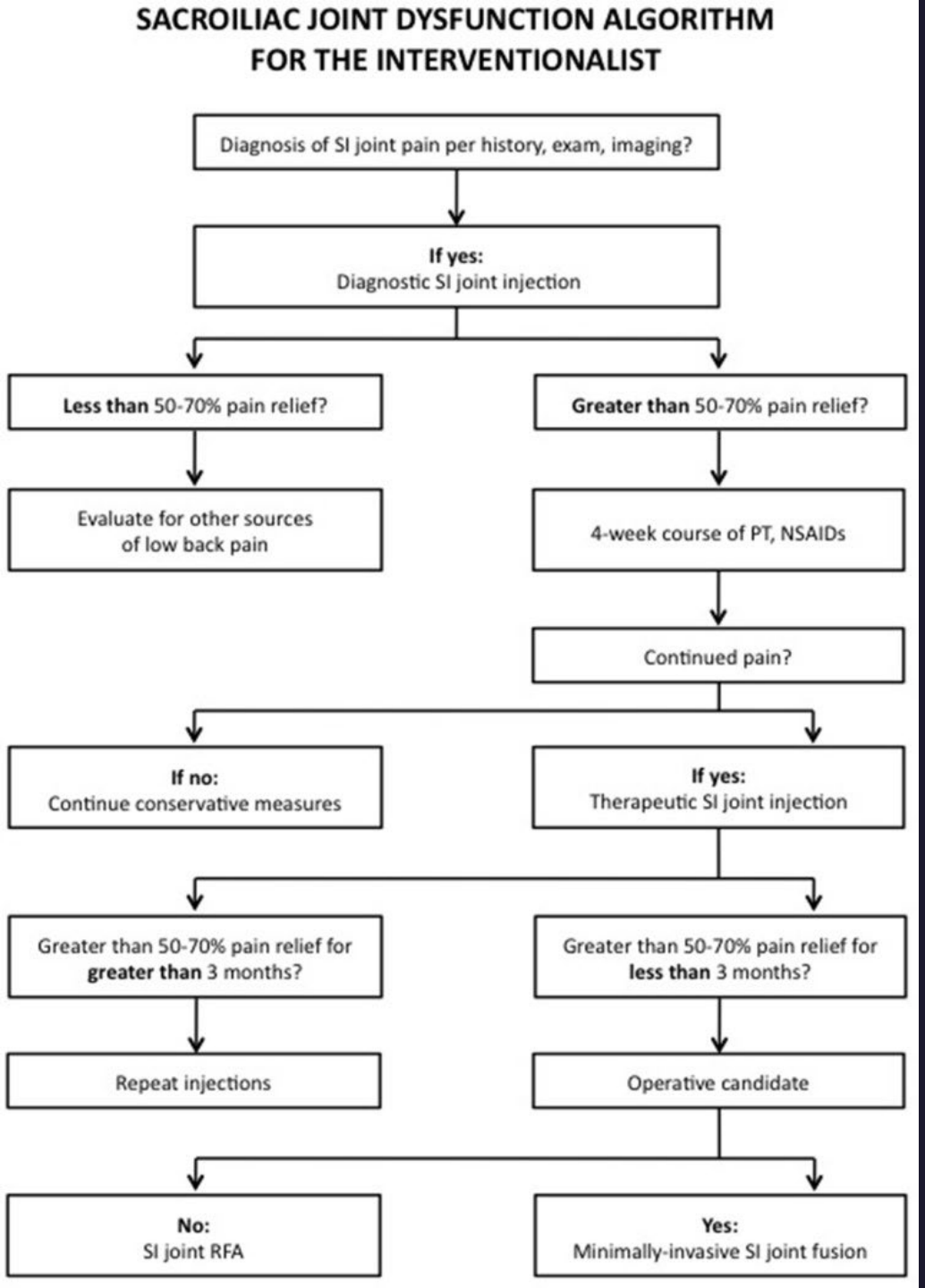


Peripheral Nerve Stimulation

- Promising results from small sized studies
  - 10 patients followed for 2 years after implantation
  - 9 patients reported PNS to be successful at 24 months
  - Average pain score reduction from 9 to 1.9

Guentchev M, Preuss C, Rink R, Peter L, Sailer MHM, Tuettenberg J. Long-Term Reduction of Sacroiliac Joint Pain With Peripheral Nerve Stimulation. Oper Neurosurg (Hagerstown). 2017 Oct 1;13(5):634-639





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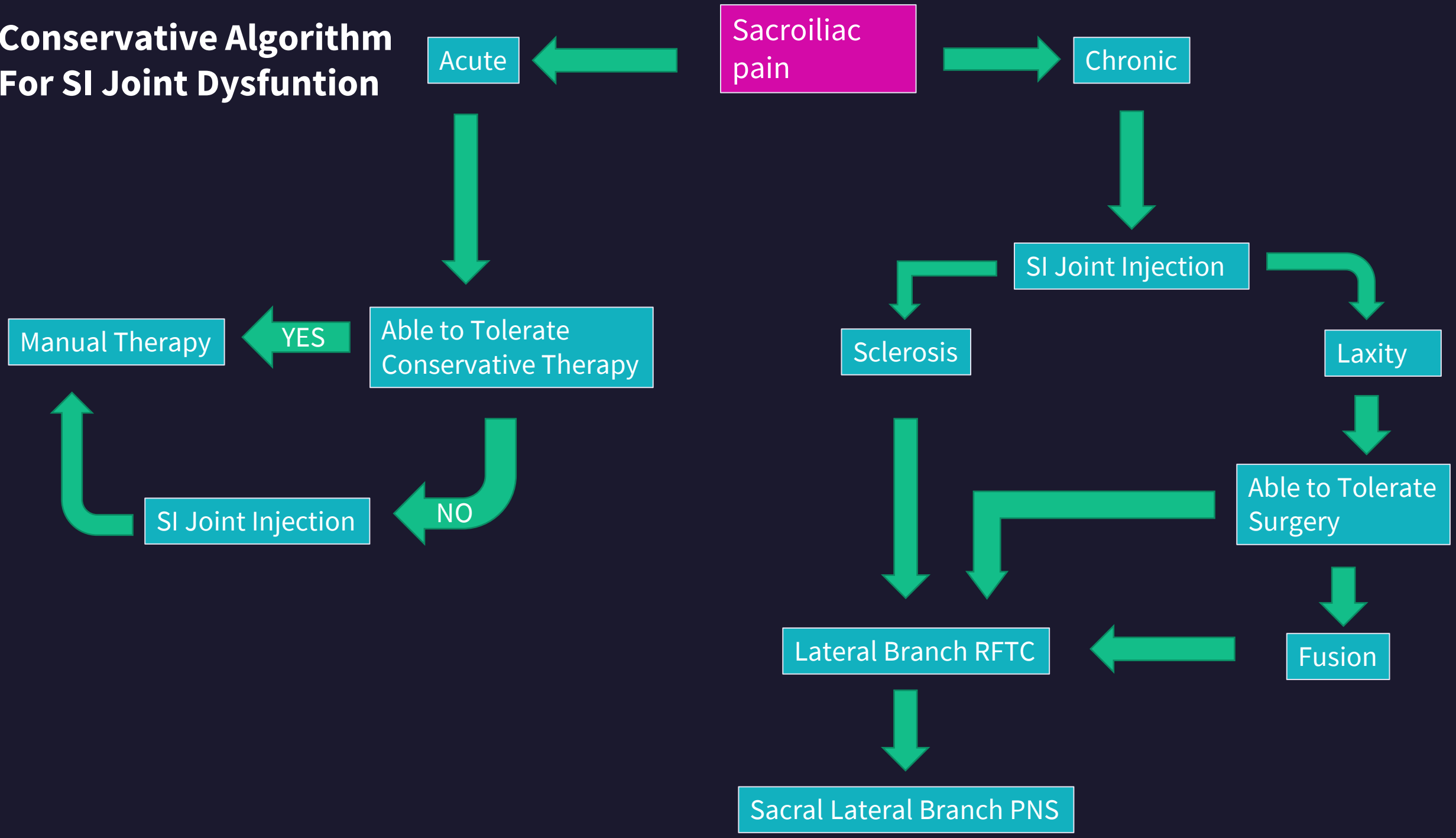
Conservative Algorithm For SI Joint Dysfuntion



Thank you