

2-year CT scan follow up of posterior sacroiliac joint compression fixation.

Kingsley R Chin¹, Fabio Pencle¹, Jason Seale¹

¹The Less institute, 3816 Hollywood Blvd, Suite No. 102, Hollywood, FL, 33021, USA.

ABSTRACT

Background: The sacroiliac joint (SIJ) may play a role in 15-30% of patients presenting for evaluation of low back pain. This surgical technique demonstrates transitioning from lateral approach to posterior percutaneous approach.

Methods: Medical charts of three consecutive patients were reviewed and percutaneous SIJ fixation fusion technique using Sacrofuse (Sacrix). Patients demographics, pain VAS score, Oswestry Disability Index were evaluated. The surgical technique of a posterior percutaneous approach was performed. Radiographic evaluation using CT was performed at 24 months to confirm fusion.

Results: Our first patient was a 51-year-old male BMI 33.3 kg/m², first stage was direct open lateral, and second stage open direct posterior 3 months after. Second and third patients': 22-year-old female post L5-S1 ALIF, L5-S1 fusion with BMI of 38.3 kg/m² and 41-year-old male BMI 29.5 kg/m² underwent posterior bilateral percutaneous SIJ fixation. CT imaging demonstrated increased bone density adjacent and within implants with intra-articular osseous bridging at 2 year. There were no failures or complications.

Conclusion: Our paper demonstrates the surgical technique of transitioning from direct lateral to percutaneous posterior sacroiliac fixation. Several pearls to improve surgery include identification of the Sacrix line, identification of superior and inferior alar. Radiographic fusion with bridging bone across the joint is demonstrated on CT.

FIGURES



Fig. 1. Oblique X-ray showing placement



Fig. 2. Axial CT showing posterior fusion