
ABSTRACT

Objective: To assess the validity of fluoroscopically-guided diagnostic intra-articular injections of local anesthetic and effectiveness of intra-articular steroid injections in treating sacroiliac joint pain.

Design: Systematic review

Interventions: Ten reviewers independently assessed 45 publications on diagnostic validity or effectiveness of fluoroscopically-guided intra-articular sacroiliac joint injections.

Outcome Measures: For diagnostic injections, the primary outcome was validity; for therapeutic injections, analgesia. Secondary outcomes were also described.

Results: Of 45 articles reviewed, 39 yielded diagnostic data on physical exam findings, provocation tests, and sacroiliac joint injections for diagnosing sacroiliac joint pain, and 15 addressed therapeutic effectiveness. When confirmed by comparative local anesthetic blocks with a high degree of pain relief, no single physical exam maneuver predicts response to diagnostic injections. When at least three physical exam findings are present, sensitivity and specificity increases significantly. The prevalence of sacroiliac joint pain is likely 20-30% among patients that have suspected sacroiliac joint pain based on history and physical examination. This estimate may be higher in certain subgroups such as the elderly and fusion patients. Two randomized controlled trials and multiple observational studies supported the effectiveness of therapeutic sacroiliac joint injections.

Conclusions: Based on the current literature, it is unclear whether image-guided intra-articular diagnostic injections of local anesthetic predict positive responses to therapeutic agents. The overall quality of evidence is moderate for the effectiveness of therapeutic sacroiliac joint injections.