

## PAIN RELIEF AFTER SACROILIAC JOINT INJECTION WITH ANAESTHETIC AND CORTICOSTEROID

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### ABSTRACT

**Introduction:** The goal of sacroiliac joint injection is to provide pain relief, improve work status and early return to work or pre pain functional state, therefore, this study is aimed to investigate role of corticosteroid and anaesthetic mixture to provide short- and long-term pain relief in patients with sacroiliac joint pain. **Objective:** To determine the effectiveness and safety of administering combination of corticosteroid and anaesthetic in sacroiliac joint injection in the treatment of patients with sacroiliac joint dysfunction.

**Methods:** This is prospective observational single centre study included 27 patients with sacroiliac joint dysfunction who received combination of triamcinolone (40mg) and ropivacaine 1ml (0.2%) for sacroiliac joint injection (we include both intra and periarticular injection) which were followed with 4 scheduled visits i.e. baseline, 4 weeks, 8 weeks and 6 months. The primary outcome variable was the changes of Visual Analogue Scale (VAS), for pain assessment during each interval of follow up. The clinical efficacy measures the secondary interest; physician's assessment on numbers of positive provocative tests and patients self-reported assessment using Rolland Morris questionnaire (RMQ) to evaluate their functional outcome. Clinical symptoms were assessed before each injection.

**Results:** At the 4 weeks and 8 weeks follow up evaluations, the VAS reduced from 5.85(±1.03) at baseline to 3.30(±1.77) at 4 weeks, 3.30(±1.86) at 8 weeks and 3.00(±1.86) at 6 months. At each interval, improvement in terms of clinical assessment using a series of provocative tests was seen with mean 1.37(±1.33), 1.63(±1.31) and 1.48(±1.05) at 4 weeks, 8 weeks and 6 months respectively. For the functional effectiveness parameters (RMQ), the SIJ injected with these drugs combination showed a greater improvement in symptoms and function at 4 weeks (9.04±3.33), at 8 weeks (9.07±4.13) and 6 months (8.26±4.92), compared to baseline (13.56±3.36). Using the one-way repeated measures ANOVA, the SIJ pain, provocative test and functional outcome were significantly improved throughout the study (P<0.001).

**Conclusion:** Our findings support the long-term effectiveness and safety of combination of steroid and anaesthetic injections for patients with SIJ dysfunction who failed conservative treatment. No complication of the administration of these medications were noted.

**Keywords:** Sacroiliac Joint, Corticosteroid, Local Anaesthetics

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