Use of Sacroiliac Joint Injection without Fluoroscopic Guidance for the Treatment of Refractory Pregnancy-Related Pelvic Girdle Pain

Abstract Type: Case Report/Case Series
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Case Report: The patient is a G1P0 37 year old Hispanic 32 week pregnant female with no significant past medical history who presented with low back pain refractory to conservative management. The patient described her discomfort as an intermittent sharp, shooting pain located near her right lower back radiating to the posterior aspect of her right leg to her knee and along the S1 distribution of her right lower extremity. The patient rated her pain a 6/10 on the Visual Analogue Scale, worsened by prolonged lying, sitting, walking and improved with standing. The patient’s physical exam revealed tenderness to palpation over the right sacro-iliac joint (SIJ) and positive reproduction of pain with diagnostic physical maneuvers. Magnetic resonance imaging revealed a diffuse disc bulge noted at the L4/L5 disc level. Due to the possible deleterious effects of fluoroscopy to the fetus the patient was treated with a blind SIJ injection with 5ml of 0.5% bupivacaine and 40 mg of triamcinolone. No complications were noted and the patient experienced complete resolution of symptoms for the duration of her pregnancy.

Background: SIJ pain is a subset of pregnancy-related pelvic girdle pain (PGP) associated with significant physical, psychological, and socioeconomic ramifications. The prevalence of pregnancy related low back pain (PLBP) and PGP is reported as high as 45% in pregnant women and 25% of post-partum patients. PGP usually starts in the second trimester around the 18th week of pregnancy with peak intensity between the 24th and 36th weeks. Risk factors for the development of PGP include strenuous work, previous low back pain, and previous history of PGP or PLBP. It is postulated that relaxin produced in increased quantities by the corpus luteum and gravid uterine decidua leads to greater ligamental laxity along the joints of the pelvis. Increased pelvic laxity leads to widening and separation of the symphysis pubis which, although beneficial for childbirth, diminishes the efficiency of load transmission from the trunk to legs and increases the shear forces across SI joint leading to pain.

Conclusion: PGP usually resolves within a few weeks or months after delivery but certain risk factors are associated with the development of long-term PGP including: pre-pregnancy back pain and prolonged duration of labor. Treatment modalities including physical therapy, transverse abdominal muscle exercises, and NSAIDS before 30th week of gestation are beneficial in the treatment of SIJ pain. Our patient had significant improvement of pain and quality of life following a blind SIJ injection. The use of SIJ injection with or without steroid, in parturients has not been established through double-blind placebo studies and further studies are warranted.

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