Disorders of the sacroiliac joint (SIJ) are considered controversial by many conventional medical physicians. Chiropractors and other physical medicine practitioners however consider SIJ problems to be common due to disorder of the sacro-iliac joint involving varying degrees of injury of muscle and/or ligamentous tissue or due to functional abnormality of the joint without significant tissue disruption.

While the incidence of lower back pain in humans parallels the incidence of the common cold, several attempts have been made to establish the prevalence of SIJ syndrome in persons with back pain. Results of these reports vary widely. Goldwaith and Osgood first discussed the possibility that SIJ injury could cause low back pain as early as 1905. In a 1995 report, Schwarzer et al remarked that “the prevalence of sacroiliac pain would appear to be at least 13% and perhaps as high a 30%” in patients with low back and buttock pain. In 1987, Bernard and Kirkaldy-Willis reported the prevalence rate to be 22.5% in 1293 patients with back pain.

**Subjective Findings and History:**
- Macro trauma: evidence of trauma adequate to support disruption of SI soft tissues, e.g. a fall, lifting, sudden step, unguarded movement. Actual SI sprain is a rare entity.
- Micro trauma: Repetitive traumatic events not singularly capable of producing injury, short hamstring muscles, asymmetrical movement
- Pain is unilateral, dull in character, over buttock; may radiate to the groin, anterior thigh or even down the leg presenting a pain pattern similar to sciatica.
- Paroxysmal character of the pain
- Pain in lower abdomen and groin due to tension in iliacus muscle is a common feature
- Pain which comes on after remaining for some time in one position, but which disappears on active movement
- Pain increased with weight bearing, standing from seated position or climbing stairs, decreased with recumbancy
- **Pregnancy:** Hormonal changes which occur during pregnancy and produce relaxation of pelvic ligs may have an effect on the SIJ for up to 12 months.

**Objective Findings:**
- Specificity, sensitivity, and predictive values of clinical tests of the sacroiliac joint are questioned. Invasive testing (anesthetic joint blocks) is similarly unproven
- Patient presentation of history, symptoms and SI tests will usually define the problem.
- The distraction test, compression test, thigh thrust/posterior shear; sacral thrust, and resisted hip abduction are probably the most reliable.
- Palpation:
  - Motion palpation (Gillet test) is commonly performed but is of questionable reliability
  - Static palpation for tenderness over and around the SIJ is the most reliable way to identify SIJ dysfunction
- Shortened hamstring muscles
- Postural evaluation may reveal: antalgia, shift of weight to unaffected SIJ, guarded gait, evaluate kinetic chain.
- Limp on affected side due to fatigue or pain
- Nerve compression signs are likely negative.
• Provocative orthopedic tests may be positive, e.g. Double SLR, Gaenslen’s, Goldthwait’s, homolateral stabilization, Smith Peterson, SLR, Yeomans’s
• Decrease/loss of normal spinal ROM, esp. sagittal,
• Sensory: possible minor hyperesthesia
• Leg length inequality
• Radiographic examination: depending on age and history of prior episodes, possible degenerative changes (see radiographic guidelines)

Assessment:
• Rule out inflammatory arthropathy, e.g. ankylosing spondylitis, Reiter’s syndrome.
• Orthopedic/neurologic examination directed at differentiating neurogenic from sclerogenic pain.
• In cases of low back pain it is important to differentiate the pain generator and indicate the specific anatomic structures involved.

Plan:
Passive Care:
• Manipulation of SIJ and other areas of joint dysfunction
• Physical therapy modalities, including myofascial therapy
• Braces/supports: trochanter belt with hypermobility, heel lift (leg length inequality), orthotics
• Medications: NSAIDS
• Supplementation to control pain and inflammation

Active Care
• Limit bed rest
• Active exercise/stretches for mobility and strength,
• Ice/heat application at home
• Walking
• Active ROM exercise, properly gauged
• Activities/work restrictions, if appropriate
• Address precipitating factors: eg. wallet in back pocket

Length of Treatment:
• Conservative therapy: 1-2 months (SI syndrome: emphasis on active care, early)
• Risk factors for chronicity: co-morbidity (degenerative joint disease, hypermobility, pelvic deformity)
• Lack of improvement: consider a fixated pubic symphysis

Referral Criteria:
• Referral to an appropriate specialist may be appropriate after 1-2 months of care without symptomatic or functional improvement or upon appearance of neurologic deficits.

Clinician Resources:

Patient Resources:
University of Maryland Medical Center. University of Maryland Spine Program

References:


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Flynn TW, Fritz JM, Wainner RS, Whitman JM. The audible pop is not necessary for successful spinal high-velocity thrust manipulation in individuals with low back pain. *Archives of Physical Medicine and Rehabilitation* 2003 Jul;84(7):1057-60


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**Clinical Pathway Feedback**

CHP desires to keep our clinical pathways customarily updated. If you wish to provide additional input, please click on the email address listed below and identify which clinical pathway you are referencing. Thank you for taking the time to give us your comments.

Chuck Simpson, DC, CHP Medical Director: csimpson@chpgroup.com