Diagnostic Algorithm for SI Joint Pain

**Chief Complaints:**
- Low back pain (below L5)
- Pelvis/buttock pain
- Hip/groin/thigh pain
- Sensation of lower extremity: pain, numbness, tingling, weakness
- Sitting problems
- Pain with position changes or transitional motions (i.e., sit to stand, supine to sit)
- Poor sleep habits due to pain
- Feeling of leg giving way or buckling

**History:**
- New onset or chronic low back pain +/- trauma
- Previous lumbar surgery
- Post-partum pain
- Description of pain
- Onset and duration of symptoms
- What makes it better/worse
- Treatment to-date: PT, medications, spine injections, other

**Spine Exam**

**Hip Exam**

**SI Joint Exam:** Point to pain while standing (Fortin finger test) / Tenderness over SI joint sulcus / Posterior SI joint tender to palpation / Patient not sitting on affected side. Single leg stance test may induce pain on supporting side.

**SI Joint Provocative Tests**
- Distraction
- Thigh Thrust
- FABER
- Compression
- Gaenslen's

If pain inferior to L5, negative neurological exam, and minimum of 3 positive provocative tests the SI joint is likely a pain generator and image-guided, diagnostic SI joint injection(s) should be ordered. Start with the Distraction Test, which has the highest single positive predictive value.

**Diagnostic SI Joint Injection**
- Image-guided posterior & inferior approach
- 22-26 gauge styletted needle
- ~0.25ml contrast medium
- Up to 1.75ml local anesthetic

**Significant Positive Clinical Response?**
Note: consider repeating to rule out false results

**Non-surgical Options**
- Medication(s)
- Physical Therapy
- SI Joint Injections
- Radiofrequency Denervation

**Minimally invasive SI joint fusion**
- iFuse Implant System®

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3. Fluoroscopically-guided SI joint injection photos courtesy of Joseph Schiavi, MD.